Ryan Stack AAS Architectural Technology

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Documents Set

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- Folding Paper
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- Repetitive Parts
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- Environmental Center

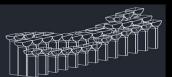
IV.

- High Rise Fitness Center
- Cultural Bridge Center

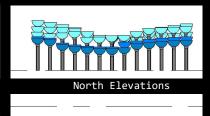




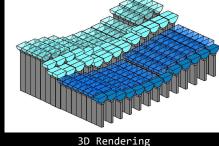
Líttle Island Píer 55 Case Study-Vísualízatíon



Officially opening on May 21,2021, Heatherwick Studio was appointed by the Diller family to take on this project called Little Island in New York City. With an old dock ruined by Hurricane Sandy there was a spot that needed to be filled. With a 260M dollar budget Heatherwick Studio along with other various architect studios took upon themselves to make a beautiful park that would be free to the public.



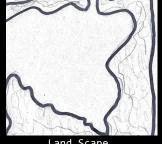




South Elevations

West Elevations

HIGHEST POINT











Land Scape

Piers

Parti Diagram

Interior Sketches

Example Pier

LOWEST POINT

Legend











Tree Line Walk P

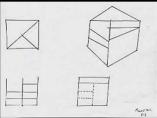
Program

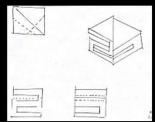
Interior Sketches

Each Pier is different in every shape/form. There is a total of 132 Tulip Shaped piers.

That are made of pre-cast concrete.

Sketches-Vísualízatíon

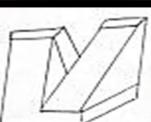


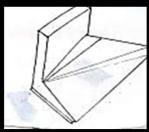


Project Objective: In this project we had to sketch a series of C-4 drawings isometrically

Project Objective: In this project we had to sketch skeleton of what we thought was interesting in the bio labs.



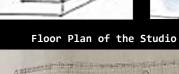


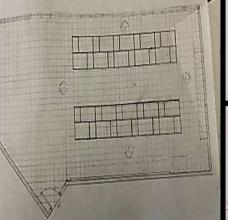


Soultion: I tried my best when sketching as I am not the best.

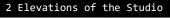
Soultion: Shading and having a good tonal sketch was my main goal.

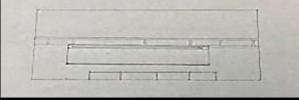
2 Sketches of a Frog Denver Art Museum

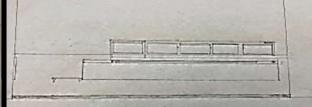




Project Objective: We had to
Sketch our Classroom along with
2 Elevations







Soultion: Trying my hardest I tried to sketch as best I could

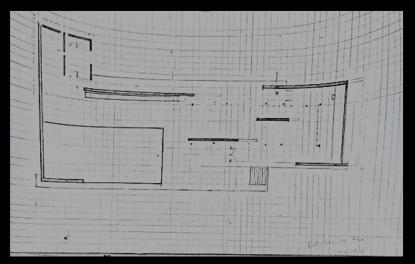


Project Objective: We had to
pick a view from the Denver Art
Museum and try our best to
sketch it.

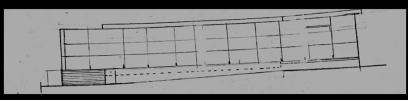


Soultion: I tried my best when sketching.

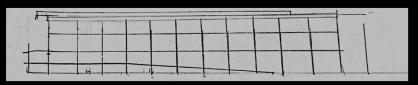
Barcelona Pavilion-Visualization



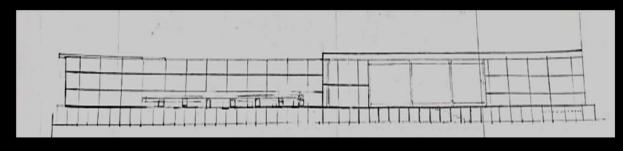
Floor Plan of the Barcelona Pavilion



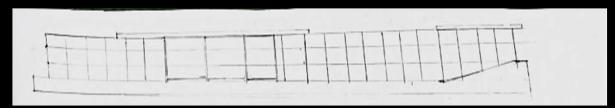
Right Side



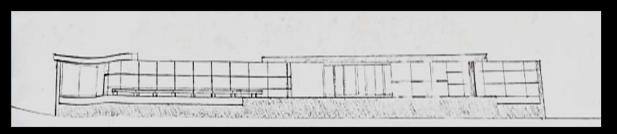
Left Side



Front Elevations



Rear Elevation



Long Section

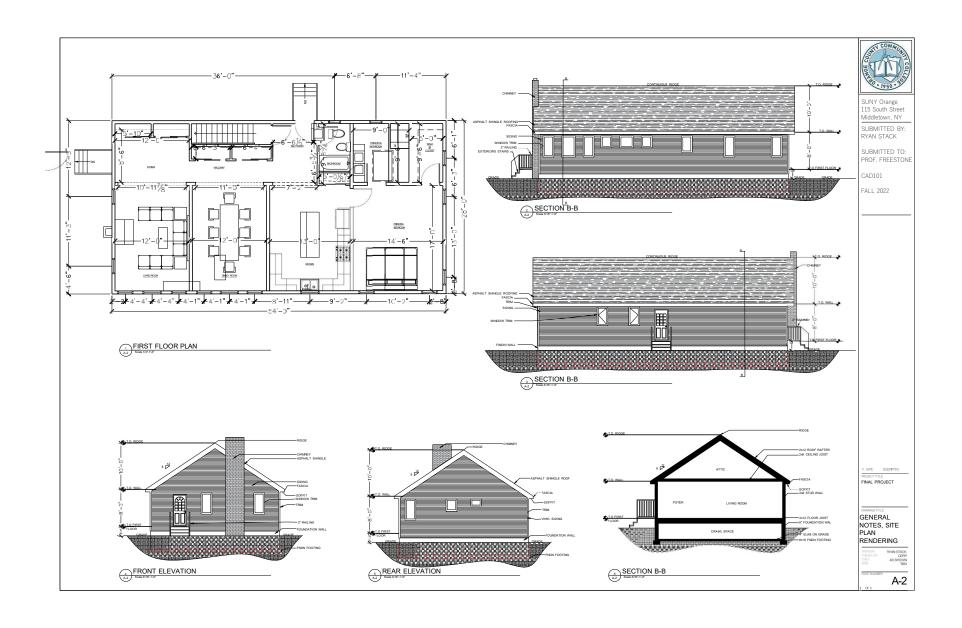
CAD 101 § 102

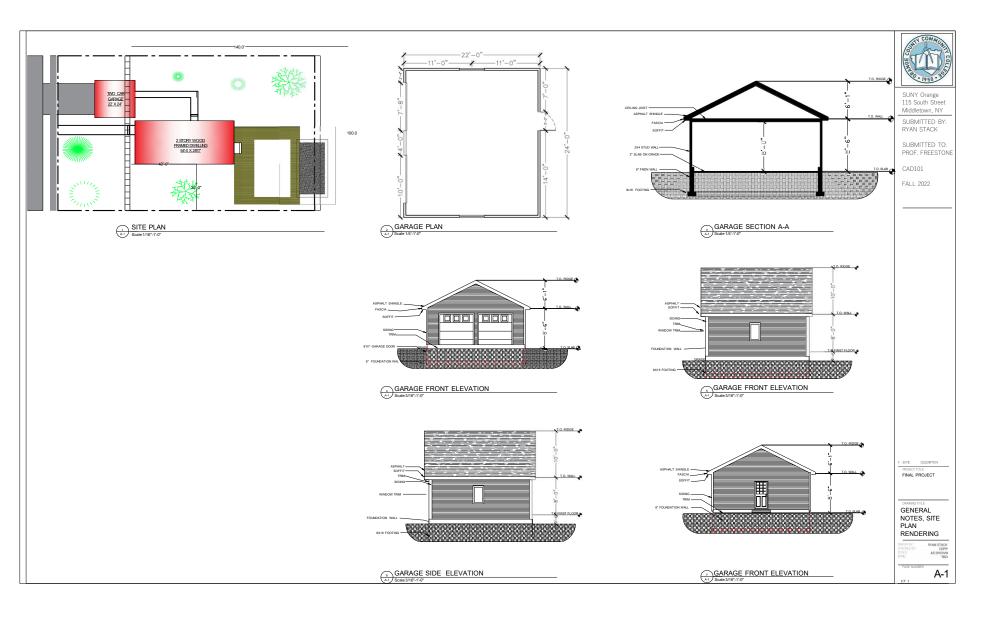
Cad 101

 Final Project- The whole semester was to draft a plan, elevations & sections for a provided site plan that was given by the professor that had an existing house and garage.

Cad 102

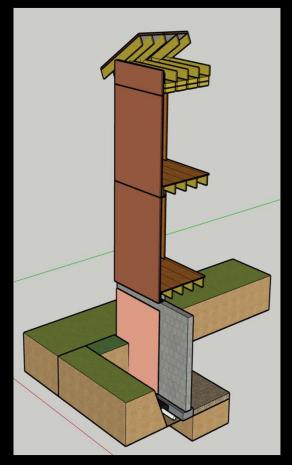
- Provided a Site Plan then was asked to make it in SketchUp then to Revit
- Wall Section in Sketchup
- Final-Log Cabin





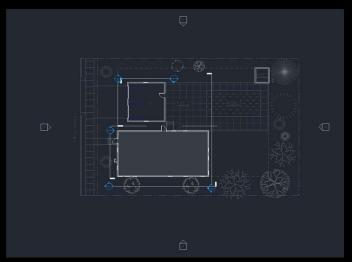
CAD 102

Objective-Design a wall section in Sketchup.

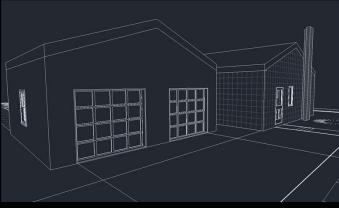


Wall Section

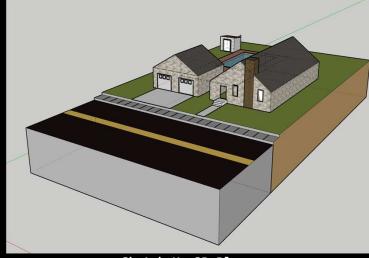
Objective-Our skills were put to the test when we were asked to make the same floor plan on these 3 different programs



AutoCAD Plan



Exterior View



Sketch Up 3D Plan

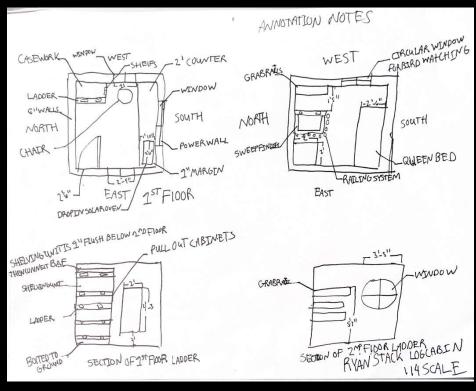


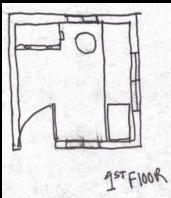
Revit Plan

Log Cabín-CAD 102

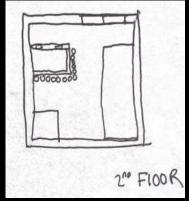
Objective- Construct a cabin measuring 8',8',16' using only wood, masonry or straw. This cabin will be utilized for a relaxing activity.

Solution- I wanted to design a structure to be as comfortable as it could. My relaxing activity is bird watching. The circular window gives me plenty of room to achieve this.

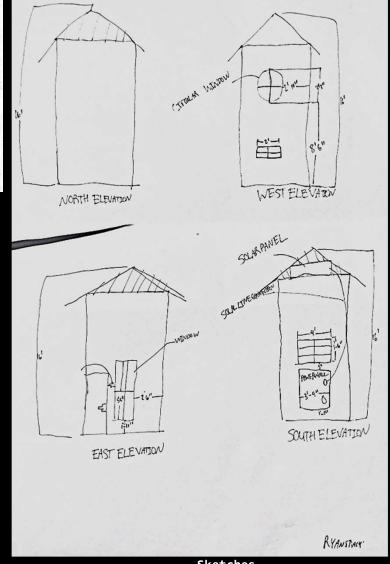




Sketches

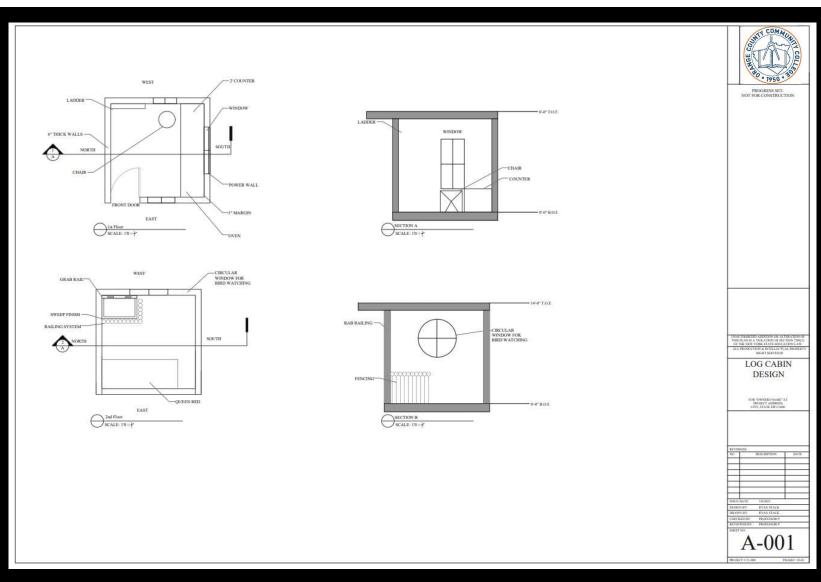


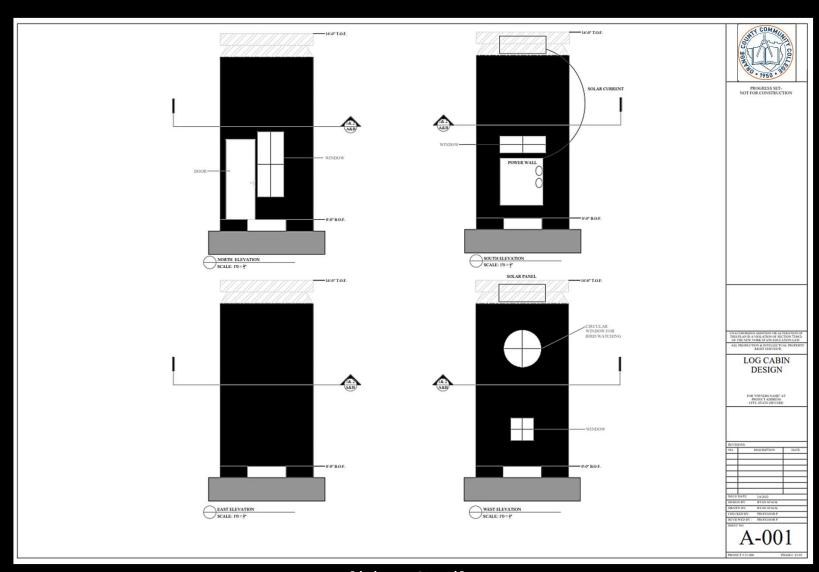
Sketches



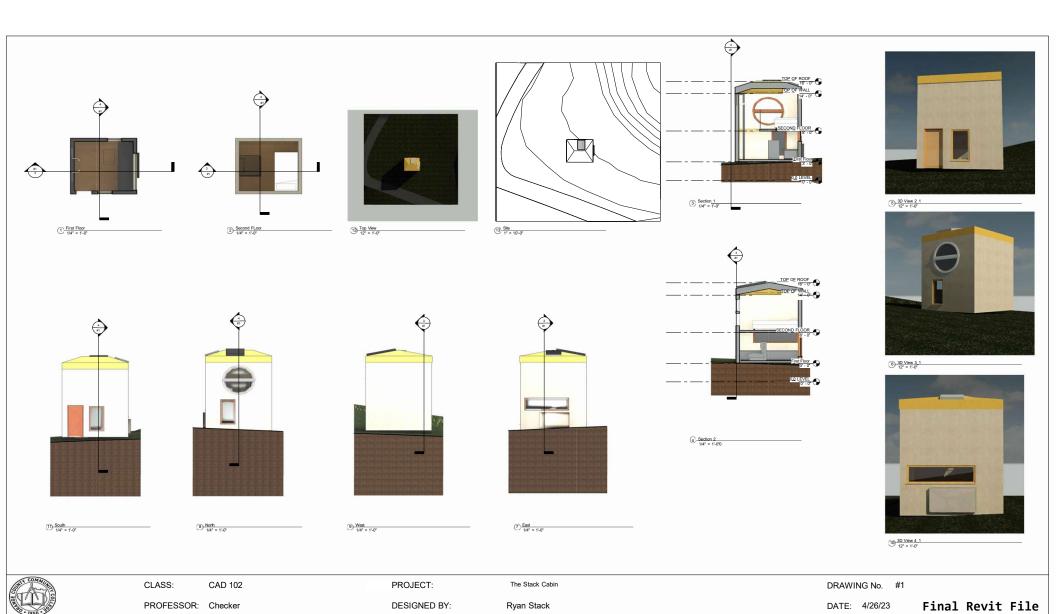
Preliminary Sketches

Sketches

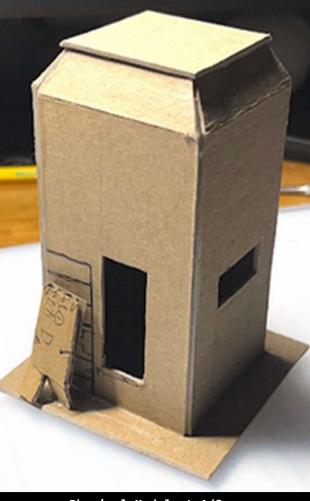


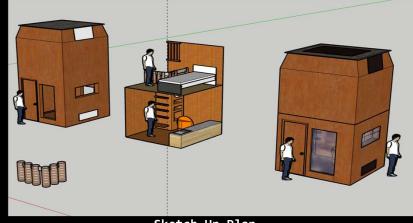


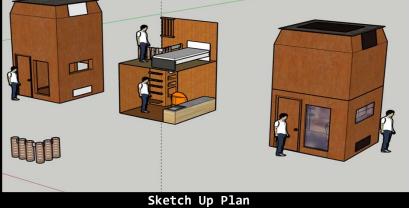
Preliminary CAD File



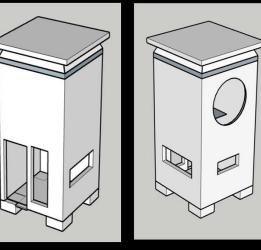
Log Cabín-CAD 102











3D Print File on Sketchup



3D Print

Physical Model at 1/8

Physical Model at 1/4

Architectural Design 1,11,111,1V

I.

- Folding Paper
- Experience Problem
- Ambiguity Problem
- Volume Project
- Repetitive Parts
- Final Project Sculpture Spaces

II

• Work & House Studio

III

- Sustainability House
- Environmental Center

ΙV

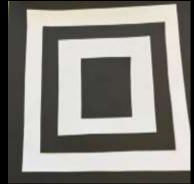
- High Rise Fitness Center
- Cultural Bridge Center

Ambiguity Problem-Design 1

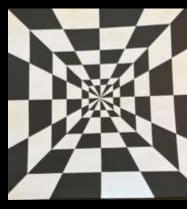
Objective-Create a 2-dimensional representation of each of the 5 design themes (Symmetry, Approximate Symmetry, Tension, Balance, Name). Using black and white construction paper on a 12"x12" background.

Solution- I did my best to express these themes in my own way.











Tension

Symmetry

Balance

Approximate Symmetry

Name

Folding Paper Project-Design 1

Objective- Through a series of formal operations, transform a 2"x12" paper to create an architectonic sculptural form.

Solution- My idea was to make appealing folds on folds on folds



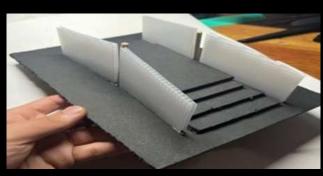




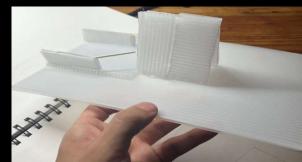
Experience Problem-Design 1

Objective- Using only primary elements (point, line, plane, volume), design three separate, distinct spaces, each based on an adjective. Spaces may be no smaller than 40 s.f. and no larger than 200 s.f.

Solution- the 3 adjectives I chose were claustrophobic, symmetrical and calm







Calm

Claustrophobic

Symmetrical

Repetitive Parts-Design 1

Objective-Build a model to the dimensions of 60"x30"x30" exploring the creation of an architectonic language and the contrasting effects of solid and void

Solution- I wanted to stress structuralism and a skeletal feel. An open vibrant experience

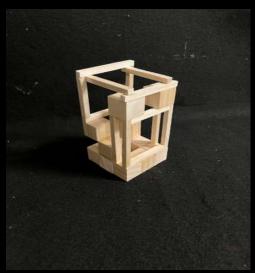
Volume Project Design 1

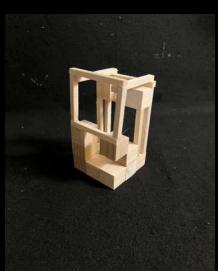
Objective-Build a model to the dimensions of 3"x3"x6" exploring the creation of an architectonic language and the contrasting effects of solid and void

Solution- I wanted to stress in this project lots of volume with having a lot of openings and good airflow in my project.





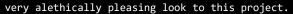


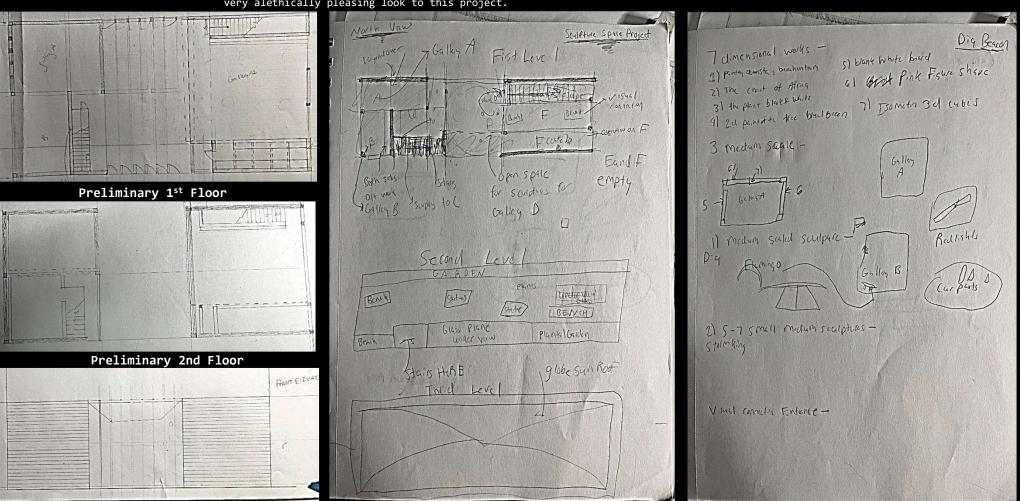


Sculpture Spaces-Design

Objective- Consider all lessons learned during the semester through the exploration of design principles in studio projects. Incorporating these principles, design a museum to house 2 and 3-dimensional artworks you researched and documented, as well as one large-scale work by Shepard Fairey and several small-scale works by Banksy.

Solution- I wanted to make a museum that was very functionable and made sure it had the proper lighting. I strived to making a



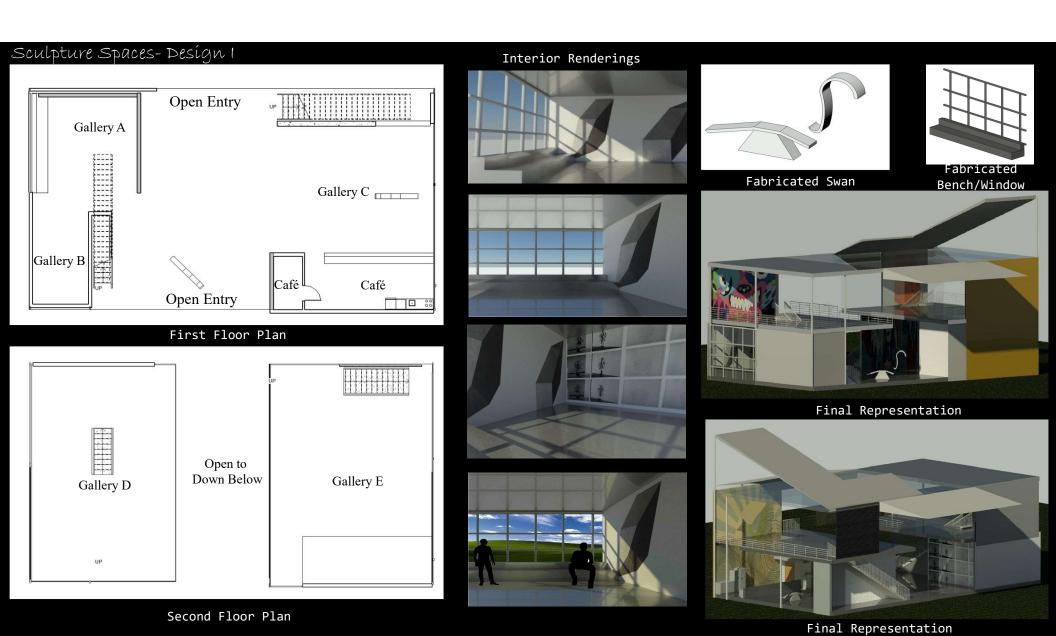


Preliminary Front Elevation

Preliminary 1st & 2nd Floors

Thought Process

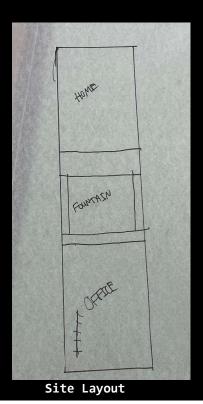


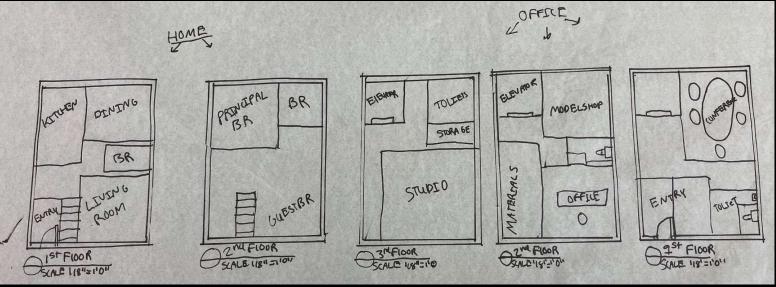


Home and Studio-Design II

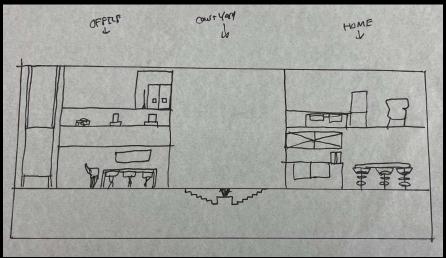
Objective- Design an office for your architecture firm that exemplifies your style and design philosophy.

Solution- I try to create to my building like the surrounding building around it. Which was provided to us.

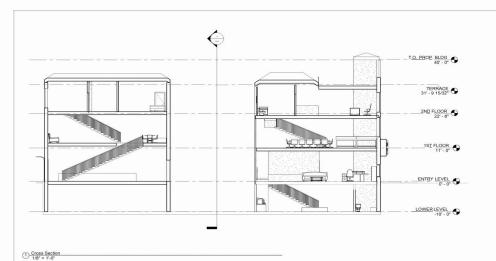


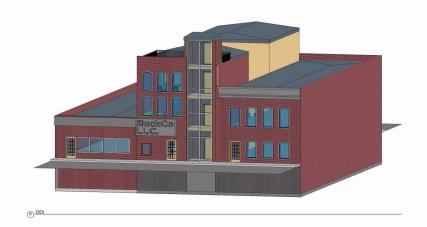


Preliminary Sketches



Section #1





TO PROP BLOD
40 · 0 · 0

TERRACE
31 · 0 1502 · 0

2ND FLOOR
11 · 0 · 0

ENTRY LEVEL
0 · 0 · 0





CLASS: DESIGN 2

PROJECT:

STACK CO L.L.C.

DRAWING No. A103

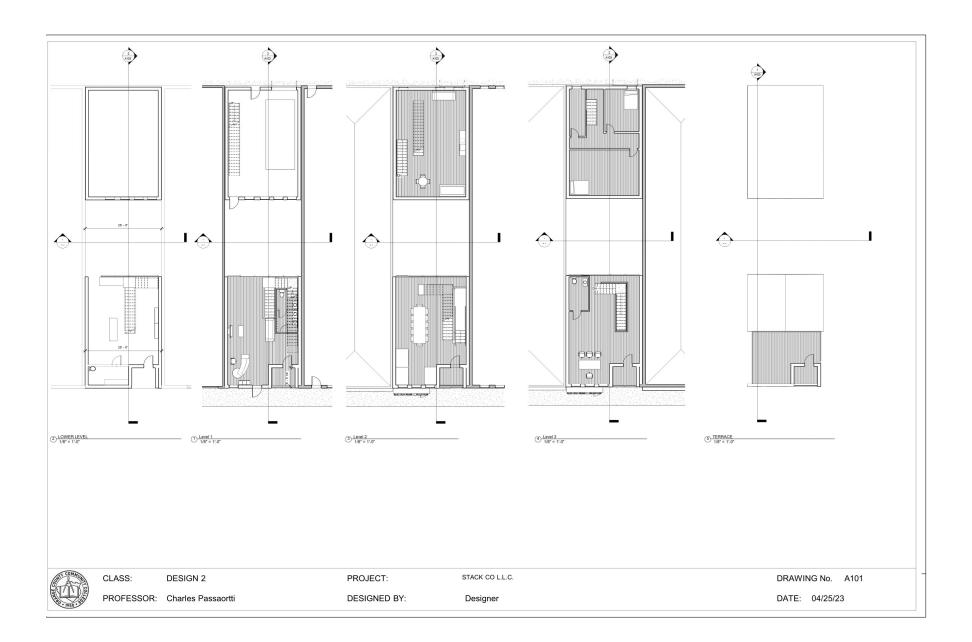
PROFESSOR: Checker

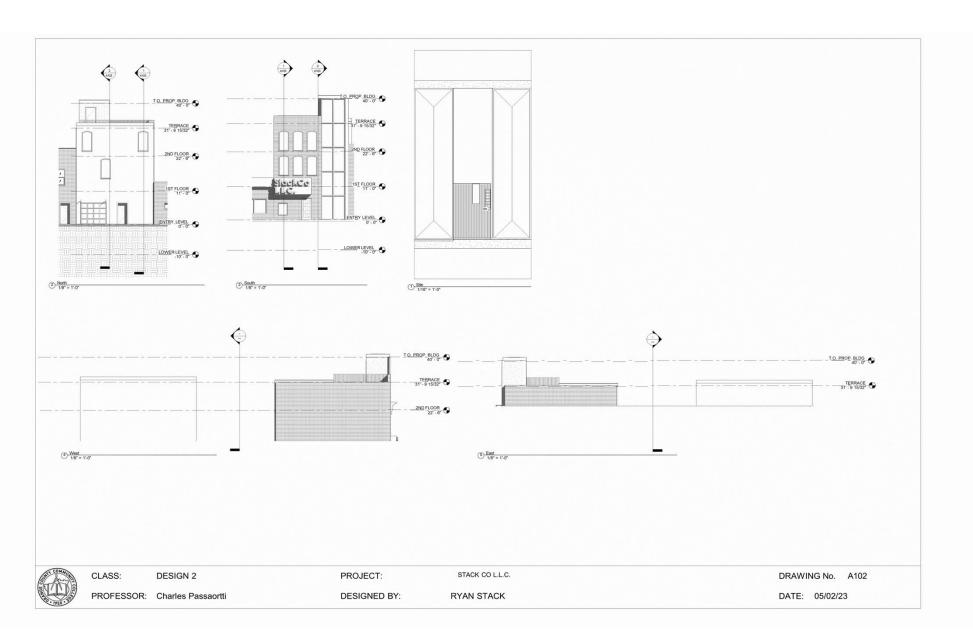
2 Good Section of Stairs 1/8" = 1'-0"

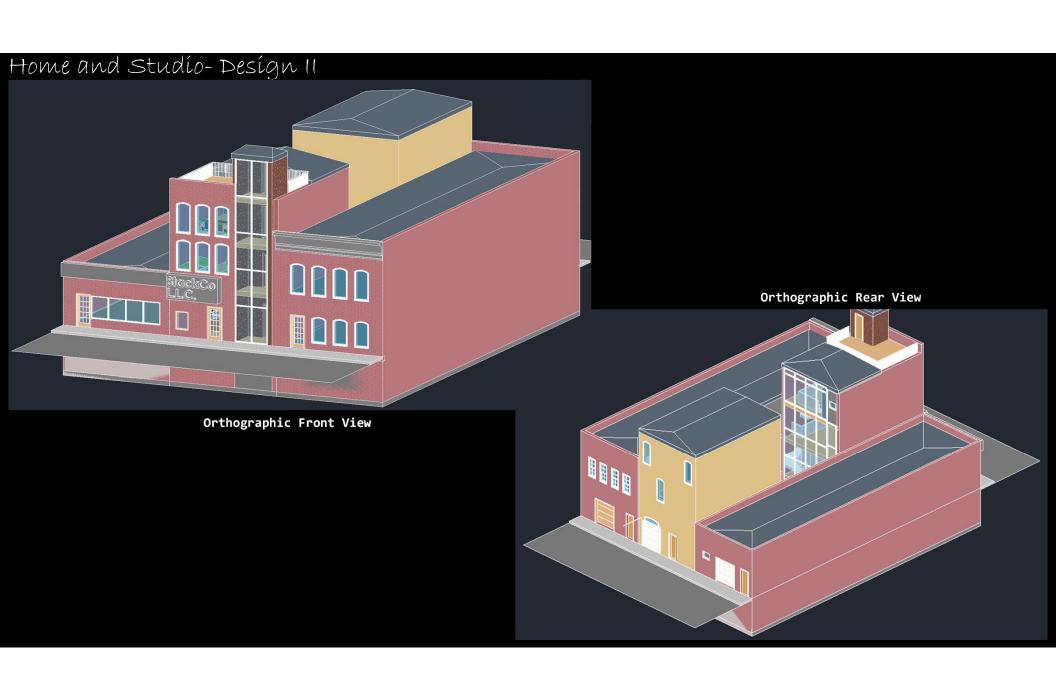
DESIGNED BY:

RYAN STACK

DATE: 05/02/23







Home and Studio-Design II

Physical Model





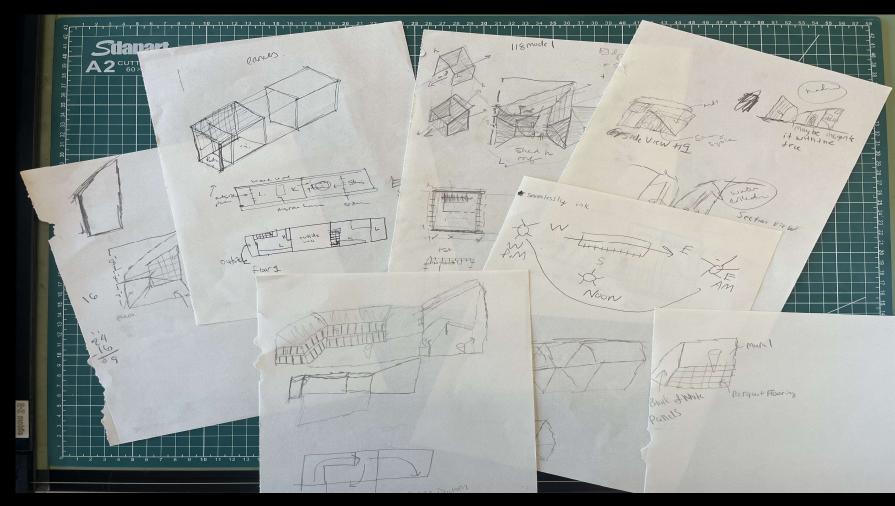
Sustainable House-Design III

Objective-

Your clients, a married couple, have purchased a five-acre wooded parcel of land in New York's Hudson Valley and has asked you to design a house on the site. The house is to depend minimally on the utility grid and is to be designed with passive and active green building design systems.

Solution-

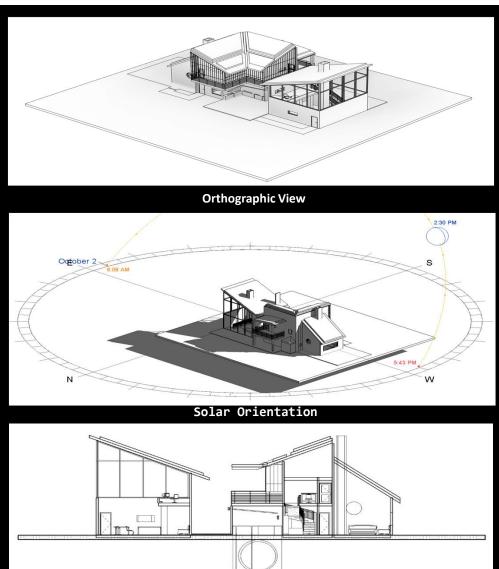
I wanted to emphasis on making a sustainable structure. Having drainage from the roof to reuse in my cistern was a major focus on my designs



Preliminary Sketches

Sustainable House-Design III First Floor Outside Patio Mech R.R. Dining Parking Lot Living . 🗆 🔐 R.R. Work Outside Patio Walkway Entry Walkway Entry Deck Area Bedroom Bedroom 1 Loft Porch Area

Second Floor



Longitudinal Section

Sustainable House-Design III

Front of House Rendering



House Information-

•2 Bedrooms •2 Bathrooms •Living Area •Dining Area/full kitchenette, •Driveway that can hold 2 cars, •Patio Area, •Outdoor living around with plants, •Mechanical room, •Fireplace, Front of Studio Rendering



Studio Information-

•Outdoor living space • 2
workspaces one on Loft for
work then the other is
underneath it •Fireplace
•Secret bed space behind
stairs



Loft in Studio



Downstairs in Studio



Secret Sleeping Space

Sustainable House-Design III Sustainability

• My design solution for a sustainable house would be using all recycled and organic materials to form my house with no outside materials. My main source of energy would be solar powered, but I would also like to a drainage system from my roof down below to my cistern through my plants in the front of my house.

Ending Point Drainage System that leads to cistern

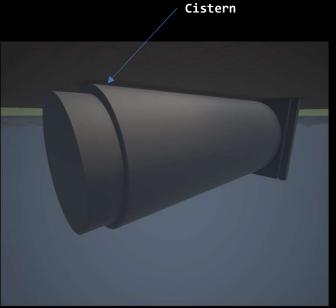
- Energy- 6 Solar Powered Panels in total
- Materials- Recycled Materials (Papercrete) (Corkscrews for floors or panels) (Newspaper wood) (Bark siding)
- Water- Cistern at the bottom to collect rainwater
- Habitat- All birds are welcome!

Start Point for

drainage



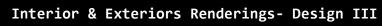






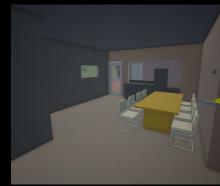


Sustainable House-Design III





Outside Porch Area



Kitchen/Dining Area



Main Bedroom



Second Bedroom



Birds Eye Front View



Birds Eye Rear View

Sustainable House-Design III

Physical Models



Working Model 1/4



Working Model 1/8



Working Model 1/4



Working Model 1/4



Final Model



Final Model



Final Model

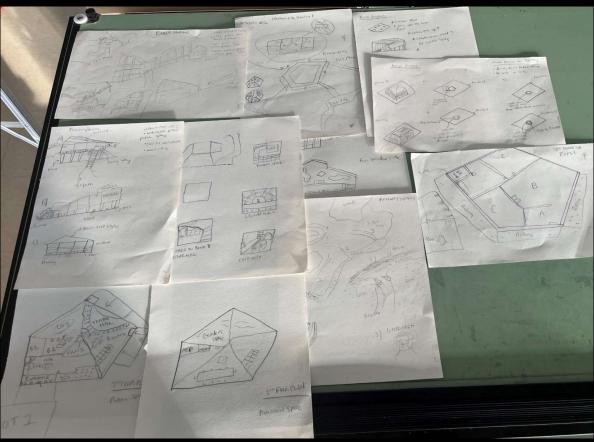
Environmental Center-Design III

Project Objective

Through this design problem, you will be exploring the relationship between site and building, nature and architecture, systems and space. Students are focused on design in section, manipulating all horizontal planes.

Design Solution

I wanted to develop a project like the pentagon. I wanted to a building with many sloped roofs and a cozy feeling when learning inside the center.

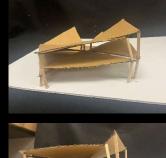


Structural Working model 1/8











Preliminary Sketches

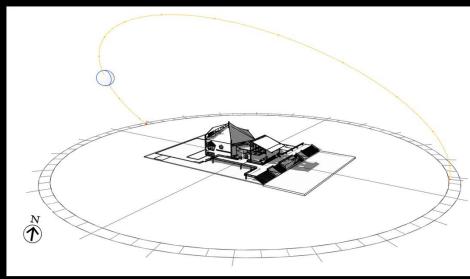
Environmental Center--Design III **Precedent** Early Mass Model Overall, View Explode View ¹ Exhibition ³ Classrooms

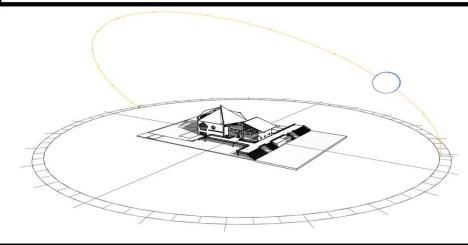
Inside of the Building

Admin/Public space

Environmental Center--Design III

Solar Orientation





4:00 PM





Passive- Where the pointed arrows are shown I will have a passive cooling system where air flow will come through these small gaps to cool down the building from the top.

Material Vigne



Various types of Green Cement



Dark Teak Wood for Walkway

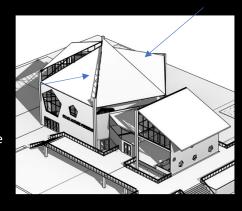


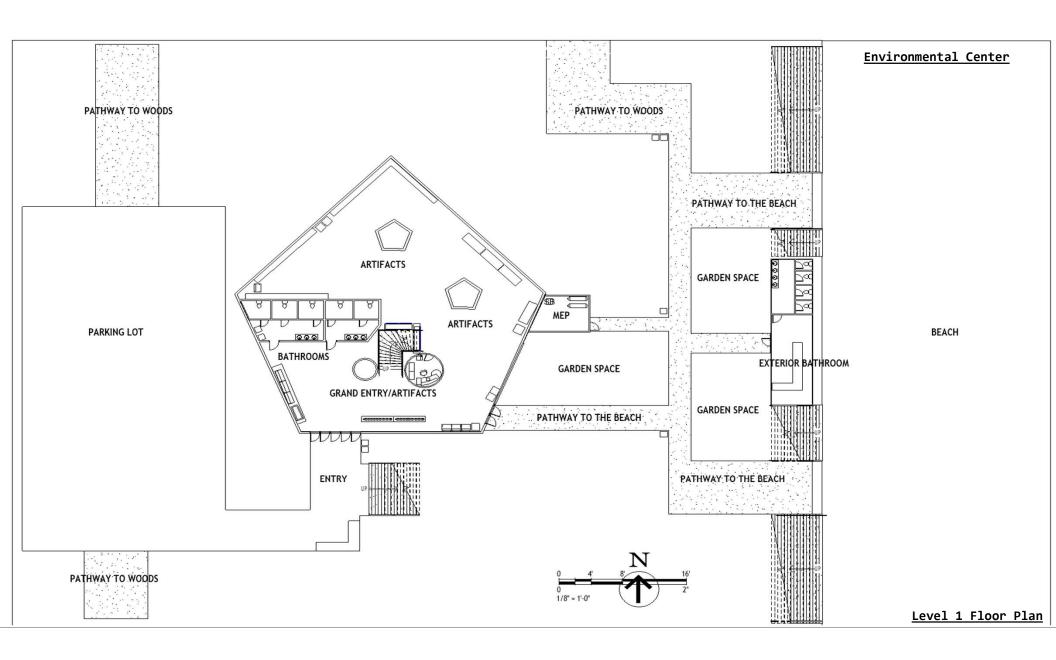
Reclaimed Slate For Roofs

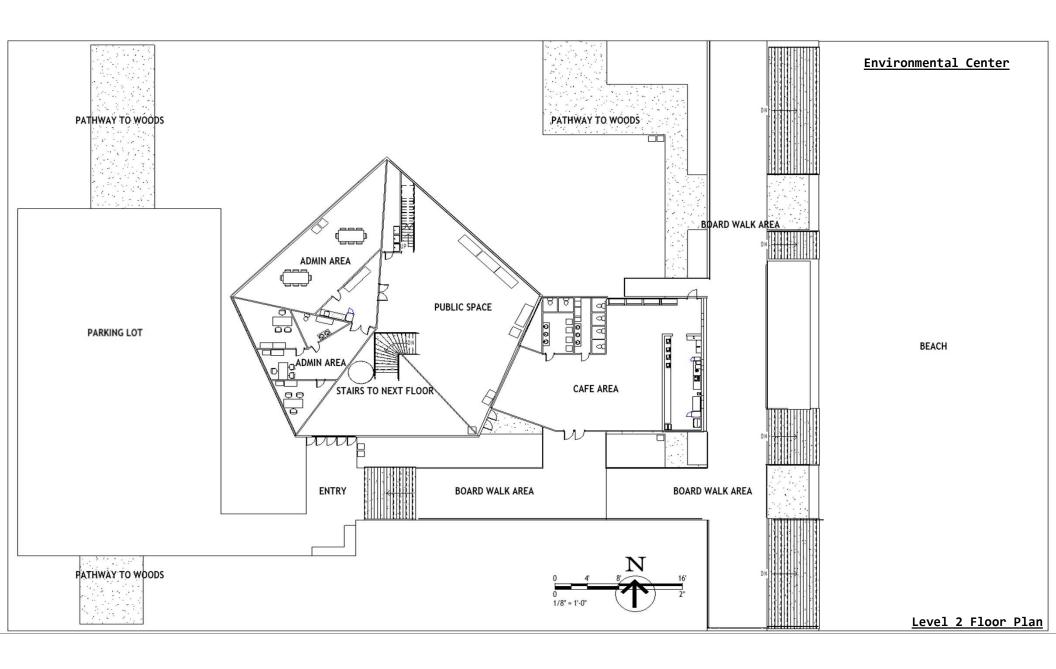
8:00 AM

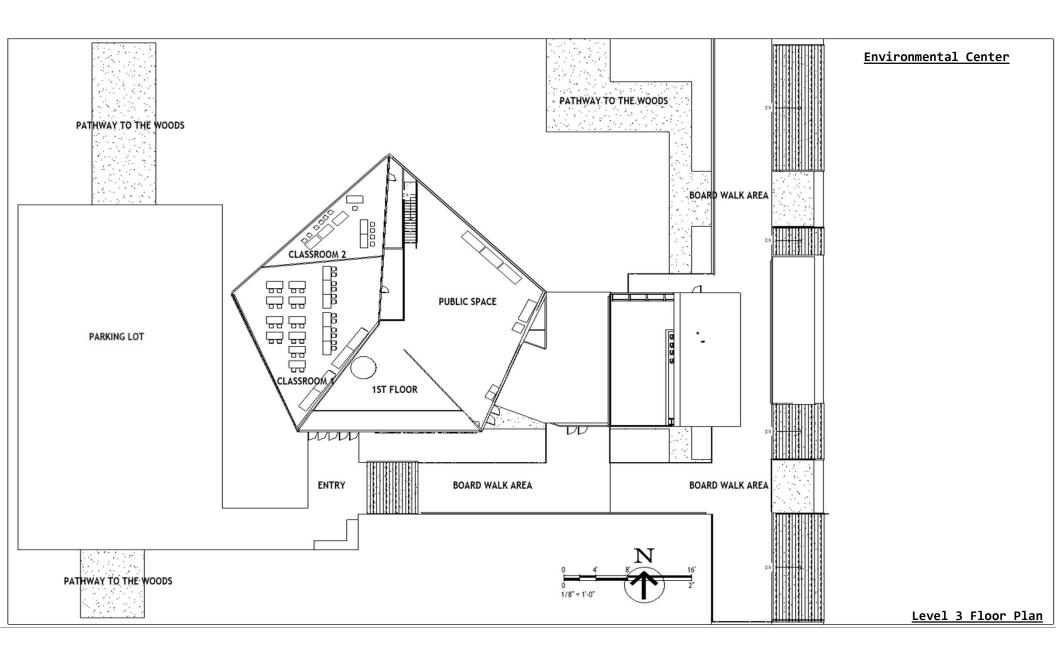


Active- Solar Panels will be oriented specially towards to sun to produce solar power. All that produced power will go back into the building.



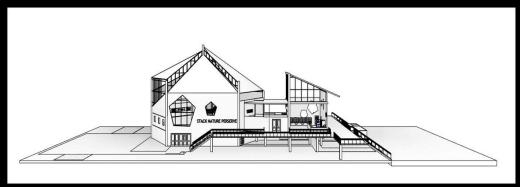


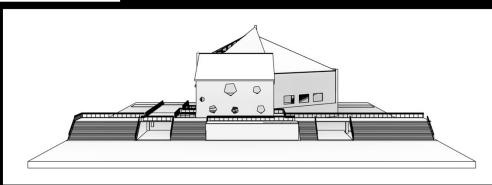




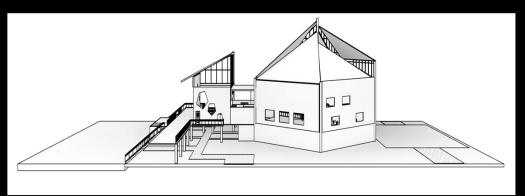
Environmental Center-Design III

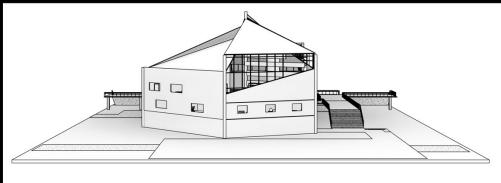
Exterior Elevations





South Elevation East Elevation





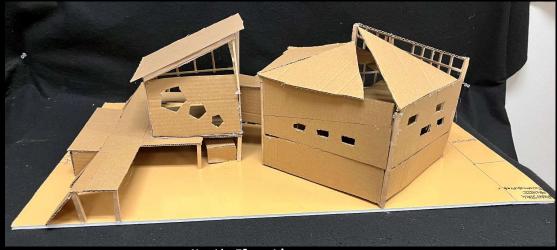
North Elevations West Elevations

Environmental Center-Design III

Physical Models

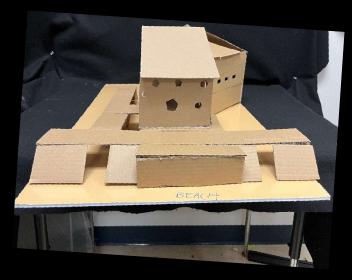


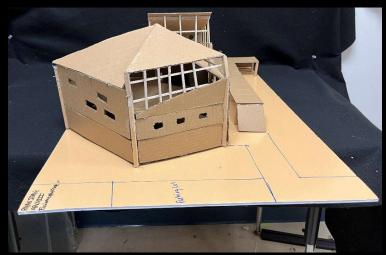
South Elevation



North Elevations

East Elevation





West Elevations

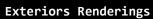
Environmental Center-Design III











Café Area



Exteriors Renderings



Exteriors Renderings

Environmental Center--Design III





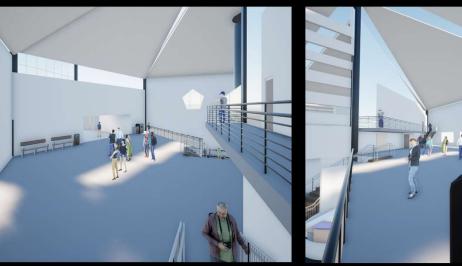
Renderings





1st Floor

S



2nd Floor Public Space

Garden Space



High Rise Fitness Center-Design IV

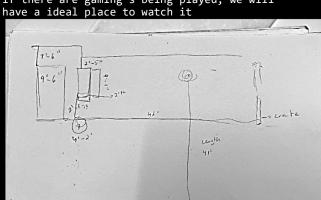
Project Objective

Was given proper parameters and guidelines provided by our professor and was to choose an area on the Suny Orange campus, then take site measurements to make a private space with two other classmates eventually

Design Solution As A Group

-We wanted a quiet location so we could do our exercise with nobody disturbing anybody

-The Open Field will give a sense of peace and if there are gaming's being played, we will

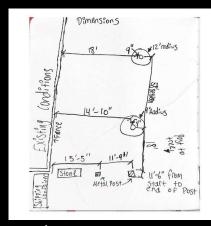


Early Site Measurements

- steep is 21



Location on Suny Orange Map



Site Measurements



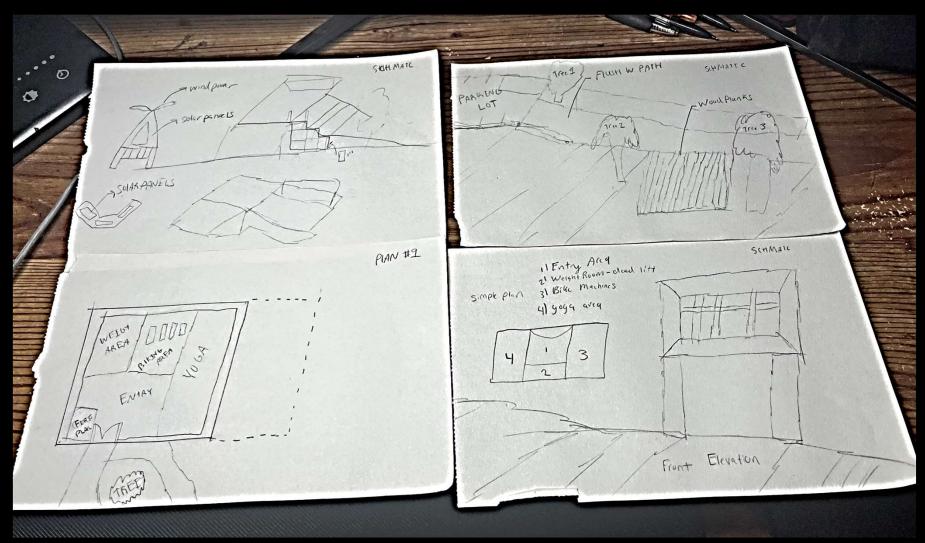
Site Analysis



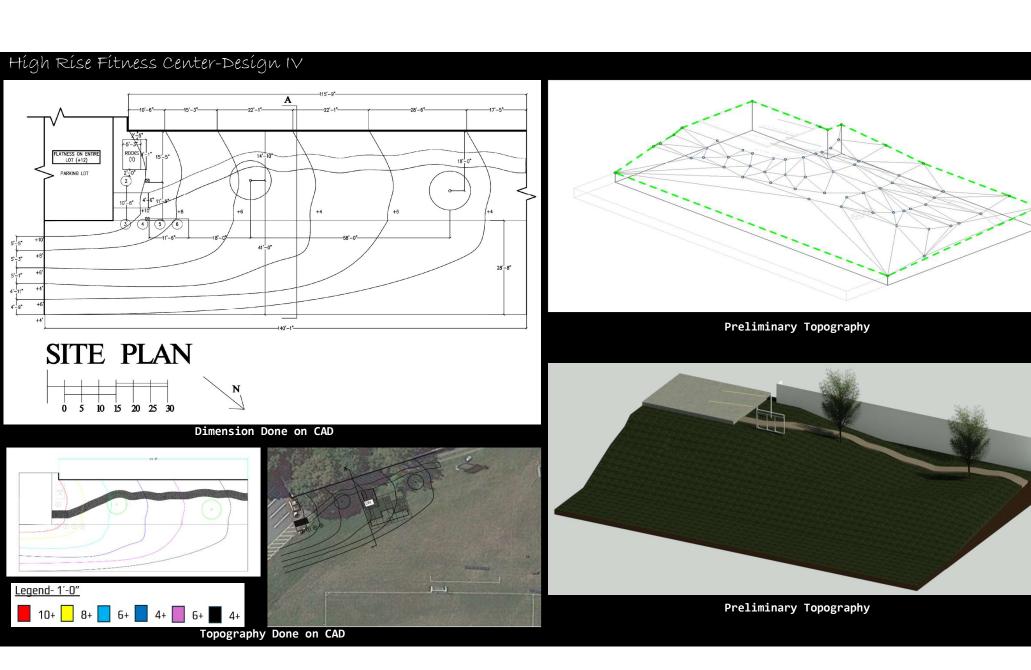
Site Analysis



High Rise Fitness Center-Design IV



My own Preliminary Schematic Design Sketches before the collaboration with my team



Hígh Ríse Fítness Center-Desígn IV









Existing Site Condition





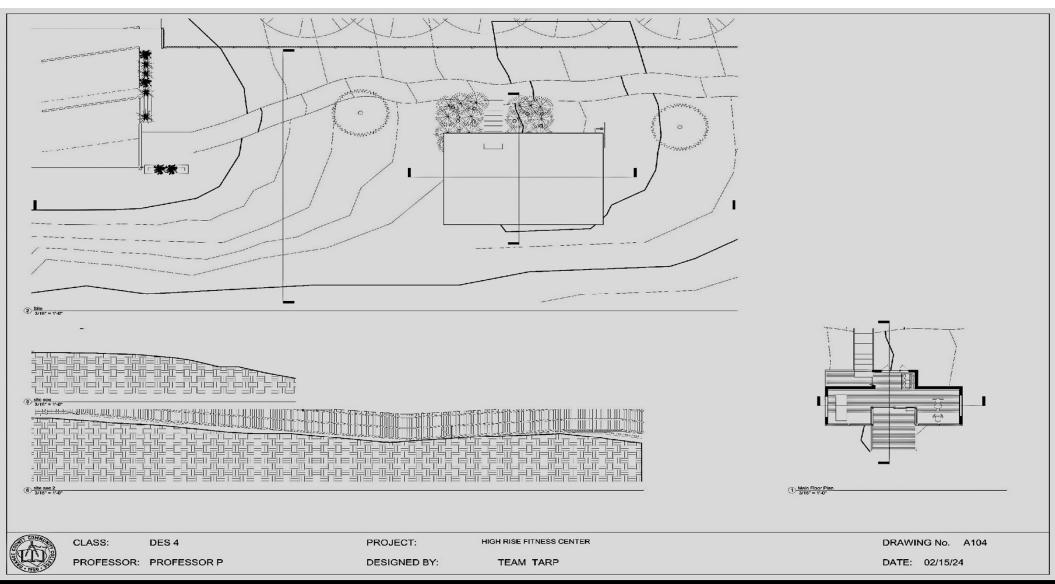




New Upgrades/Improvements



Sheet #1



Hígh Ríse Fítness Center-Design IV







Final Physical Model

-Once we all combined as a group me and my group members stressed importantly a sense of safety and calmness when entering our facility.

-Our Main Goal was to provide a lot of public and open space to the people in Atlanta Georgia.

Programmatic Requirements

The following are **minimum** requirements:

Entry area

80 sf.... Vestibule: airlock transition between interior and exterior

1,000-2,000 sf.... Lobby: including a reception counter with 3 staffed stations for intake and information, and a waiting area which can also accommodate event gathering and serves as a multifunctional space

as needed.... Restrooms: (4) family and unisex restrooms as defined by the American Restroom Association (see resources page)

Staff and Support Areas

150 sf.... Director's Office

350 sf.... Conference Room; for 12 people

150 sf each.... Legal Offices: 3 private enclosed offices for immigration legal service referrals

100 sf each.... Support Service Offices or Stations: 8 spaces for services such as housing and rent relief assistance; mental health referrals; health care enrollment, school enrollment assistance, child care development; food and basic needs assistance, employment referrals and job coaching

800 sf.... Computer Training Lab

500 sf each.... Classrooms: 3 for ESL and other lectures and seminars

Misc

300 sf.... Workroom/Storage

200 sf.... Staff Break Room/Pantry

50 sf.... Janitor's Closet

10% of total sf.... Mechanical/Services

as needed.... Circulation

Exterior Spaces

Controlled exterior gathering space, locked when the facility is closed, with WIFI, charging stations, seating
Public Space: for events and daily use, accessible to public 24/7, with WIFI, charging stations, seating, shade (200 sf minimum should be
shaded

32 minimum parking spaces

Submission Requirements

Project Description Document

18

Provide a written description of your concept and the design solution. Maximum 500 words. Letter sized [8-½" x 11"] document, portrait orientation. Max.pdf size: 20 MB. Submit one digital .pdf of this text document file.

- Design Panels which include images and drawings. Two 24"x36" sheets, portrait orientation. Max.pdf size: 20 MB. Submit one digital .pdf that includes both sheets. Include the following drawings and/or models (physical or digital):
 - a. Site plan
 - Floor plans (the ground floor may be combined with site plan into one image)
 - Elevations, physical model and/or exterior renderings
 - d. Building section(s)
 - e. Interior rendering(s)
 - Any additional drawings that help the jury understand your design and concept.
- The official language is English.
- All exterior images must include the site context including the proportions of surrounding building structures.

5. Do not include personal information such as designer/applicant name(s), information about the course, instructor or school on the submittal materials. Include only a project title and the registration number on the board. Registration numbers will be provided after the completed registration is received along with information about naming the files for submission. 21

 The scale of all drawings and model(s) are at the discretion of the student. A graphic scale must be included on plans, sections and elevations.





Cultural Bridge Center- Design IV ANDREW YOUNG INTERNATIONAL BLVD CENTENNIAL OLYMPIC PARK DR 221.93







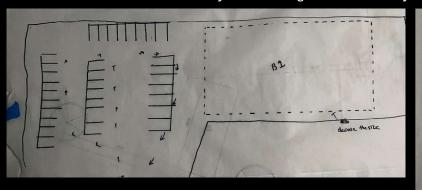
Existing Images

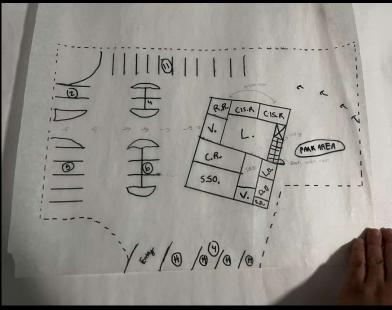
Provided Site Plan

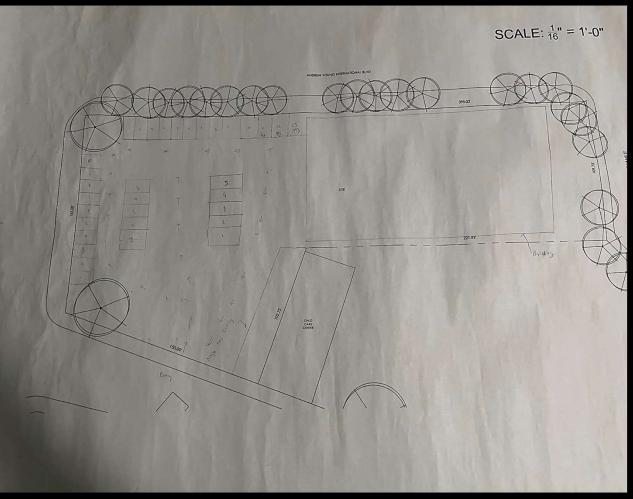
Being apart of a group 3 it broke we broke up the work evenly which helped a lot

Cultural Bridge Center- Design IV

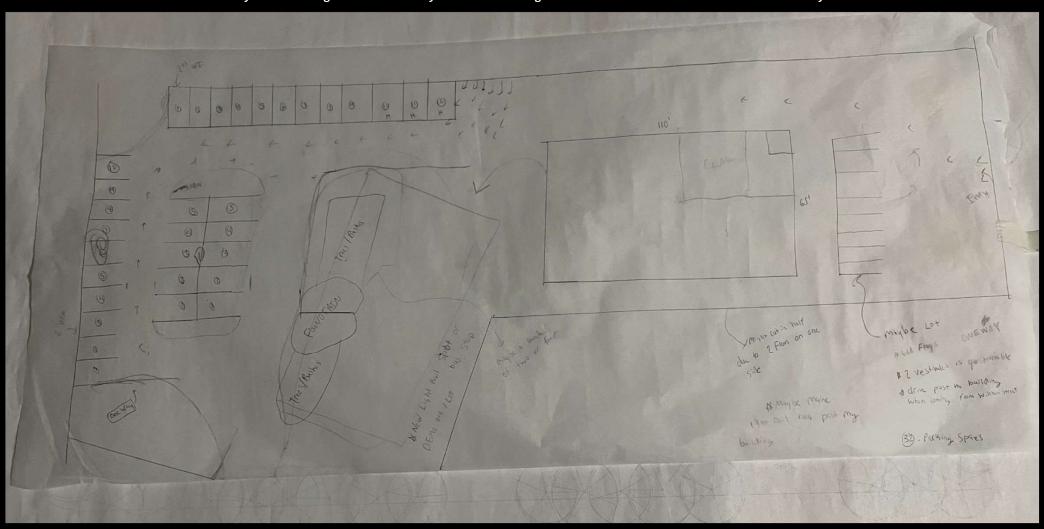
My own Parking Lot Preliminary Schematic Design Sketches before the collaboration with my team

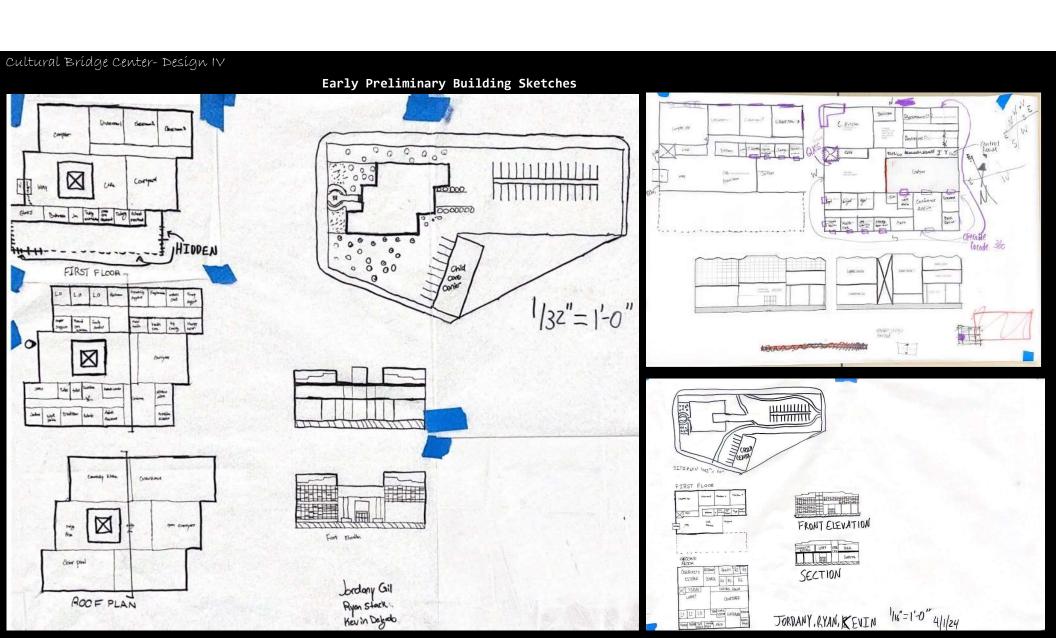




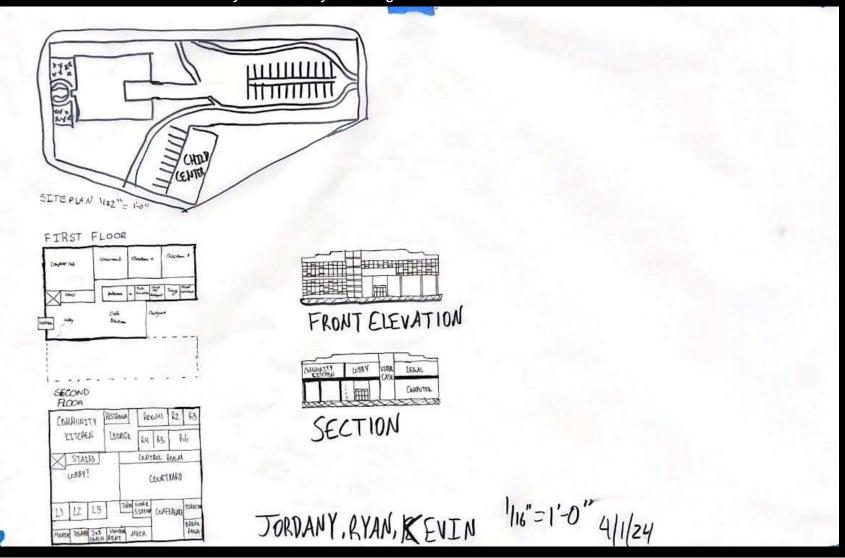


My own Parking Lot Preliminary Schematic Design Sketches before the collaboration with my team

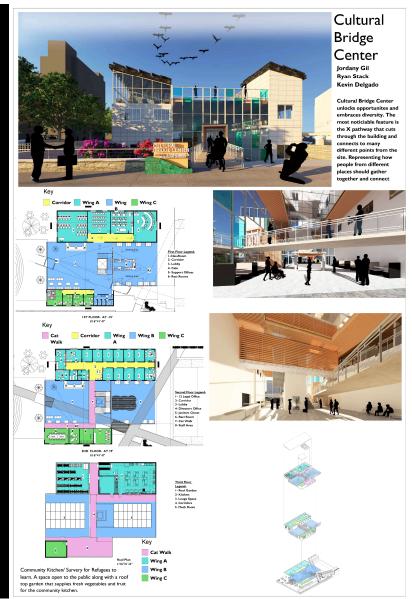


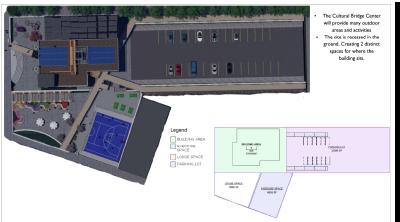


Early Preliminary Building Sketches



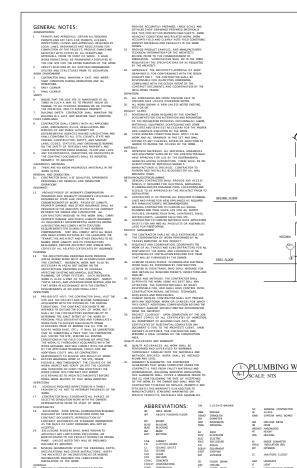
Cultural Bridge Center-Design IV











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RF ABOVE FINI BD BOARD BLDG BUILDING BXG BLODING BM BEAM BOT BOTTOM

CAR CARINT
CD CLOTHES DRYER
CI CLIMBG JOISTS
CIE CLEMB
COL CONCERT
CONST CONSTRUCTION
CONT CONTROLLION
CONTROLLION
CONTROLLION
CONTROLLION
CONTROLLION
CONTROLLION
CT C

ARREVIATIONS OW CLOTHES WASHER AD BREVIATIONS:

AD AREA DRAW
AFF ABOVE FINISHED FLOOR
BD BOARD
BD

EA EACH
ELEV ELEVATION
ELEC ELECTRIC
ENCL ENCLOSURE
EQ EQUIAL
EQUIP EQUIPMENT
EXIST DOSTING
EXT EXTERIOR

FD FLOOR DRAIN
FINT FINTURE
FJ FLOOR JOIST
FIR FLOOR JING)
FOW FACE OF WALL
FP FIREPROOF

75-1 F F

85 PROFESSION COLUMN AND 1888 5-0

PLUMBING WASTE RISER DIAGRAM

A-1 SCALE: NTS

LAM LAMINATE PL PLATE
LT LIGHT PP POWER PANEL
LV LOW VOLTAGE EXTURE PT PANET
PRO PARTITION MKT MATERIAL MKK MAXIMUM

		MECH	MECHANICAL	RAD	ganus	ur	HADEROIT
	GENERAL CONTRACTOR	MED	MANUFACTURER	REINE	REINFORCING	UON	LINI ESS OTHERWISE
	GLASS	MN	MINIMUM	RECO	REQUIRED		NOTED
9	GYPSUM WALL BOARD	MISC	MISCELLANEOUS	REV	REVISE (D) (ION)		
		MT.	METAL	RM	ROOM	VB	VINYL BASE
	HOLLOW METAL			RR.	ROOF RAFTERS	VCT	VINYL COMPOSITION THE
	HOUR	NIC	NOT IN CONTRACT			VEST	VESTIBULE
CWC	HARDWOOD	NO	NUMBER	SA	SUPPLY AR	VP	VAPOR BARRIER
	HEIGHT	NOM	NOMINAL	SF,		VWC	VINYL WALL COVERING
	HEATING	NTS	NOT TO SCALE	SQFT	SQUARE RET		
				9	SQUARE INCHES	W/	WITH
	INSIDE DIAMETER	oc	ON CENTER	SM	SMILAR	W/O	WITHOUT
UL	INSULATION (ED)	occ	OCCUPANCY	SPEC	SPECIFICATION	WD	W000
	INTERIOR	OD	OUTSIDE DIAMETER	55.	STAINLESS STEEL	WH	WATER HEATER

75-1

2 SITE PLAN A-1 SCALE: 3/16" = 1'-

Sheet Set						
NUMBER	DESCRPTION					
A-1	A-1 SITE PLAN, GENERAL NOTES, ABBREVATIONS					
A-2	FLOOR PLANS					
A-3	ELEVATIONS					
A-4	SECTION & DETAILS					
A-5	STARS, DECK AND PORCH DETAILS					
A-6	DOOR, WHODAS AND FINISHED SCHEDULES & DETAILS AND INTERIOR ELEVATIONS					
A-7	GARAGE FLOOR PLANS, ELEVATIONS & SECTIONS					
A-8	DOOR, WHOOM AND FINISHED SCHEDULES & DETAILS, AND INTERIOR ELEVATIONS					

SCALE: 3/16" = 1'-0"							
Sheet Set							
NUMBER	DESCRPTION						
A-1	SITE PLAN, GENERAL NOTES, ABBREVIATIONS						
A-2	FLOOR PLANS						
A-3	CLEWATIONS						
A-4	SECTION & DETAILS						
A-5	STARS, DECK AND PORCH DETALS						
A-6	DOOR, WHOOMS AND FINISHED SCHEDULES & DETAILS AND INTERIOR ELEVATIONS						
A-7	CARACE FLOOR PLANS, ELEVATIONS & SECTIONS						



Middletown, NY SUBMITTED BY: RYAN STACK

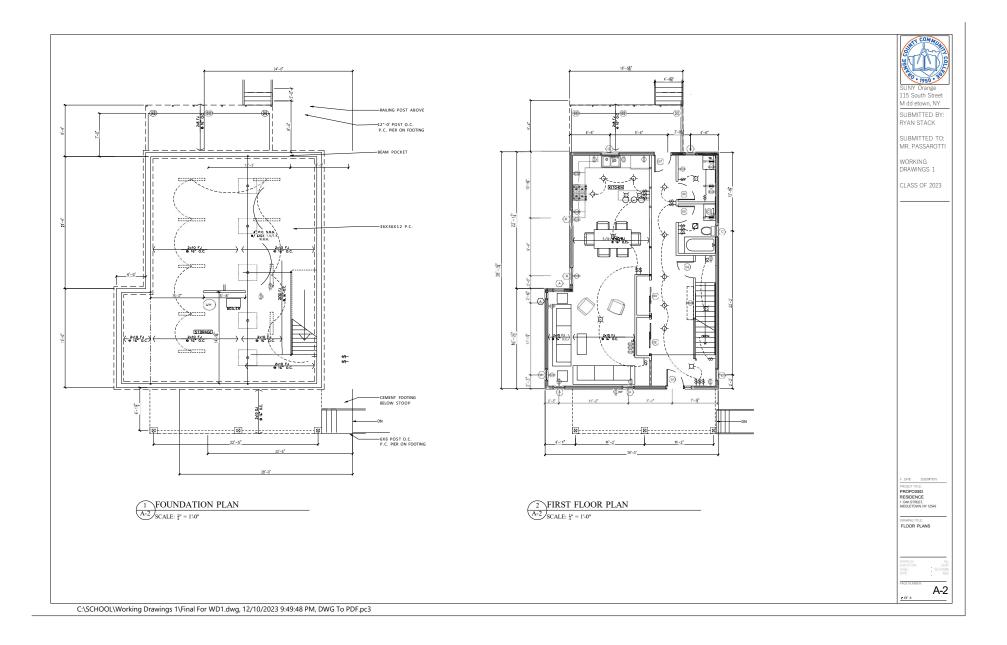
SUBMITTED TO: MR. PASSAROTT

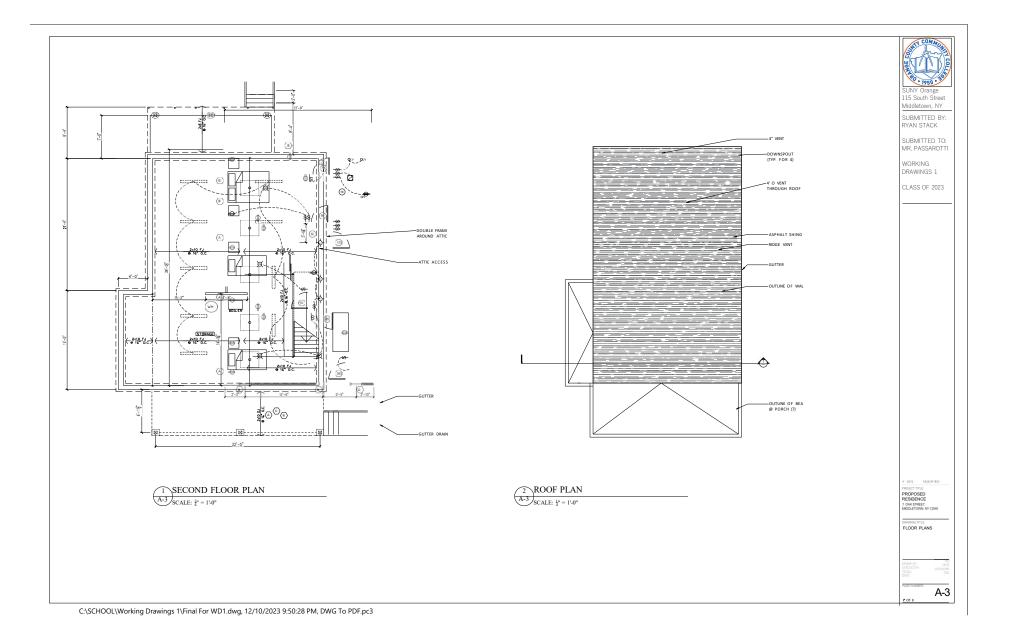
WORKING DRAWINGS 1

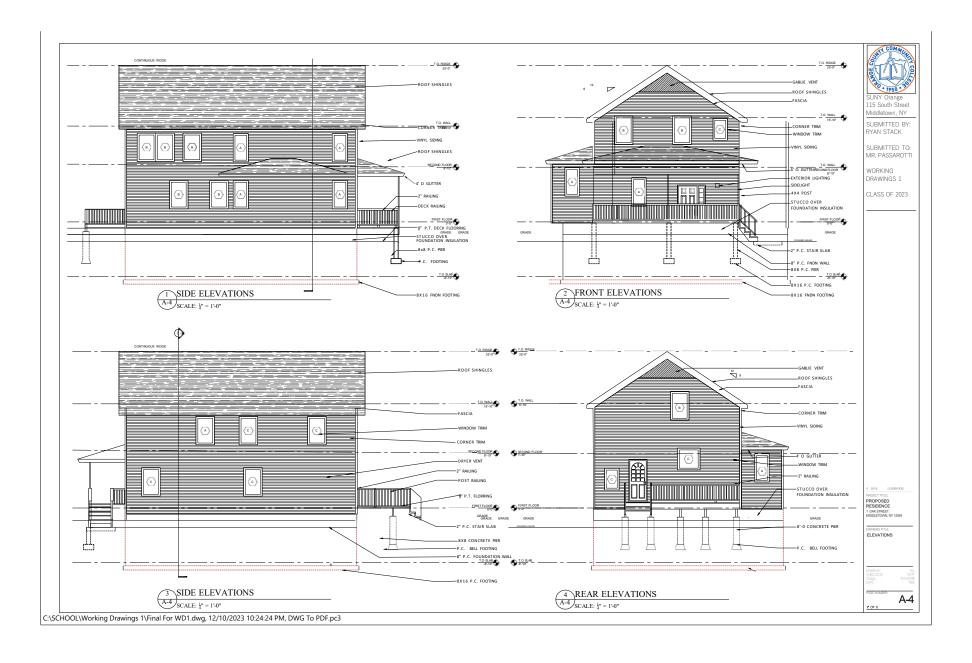
CLASS OF 2023

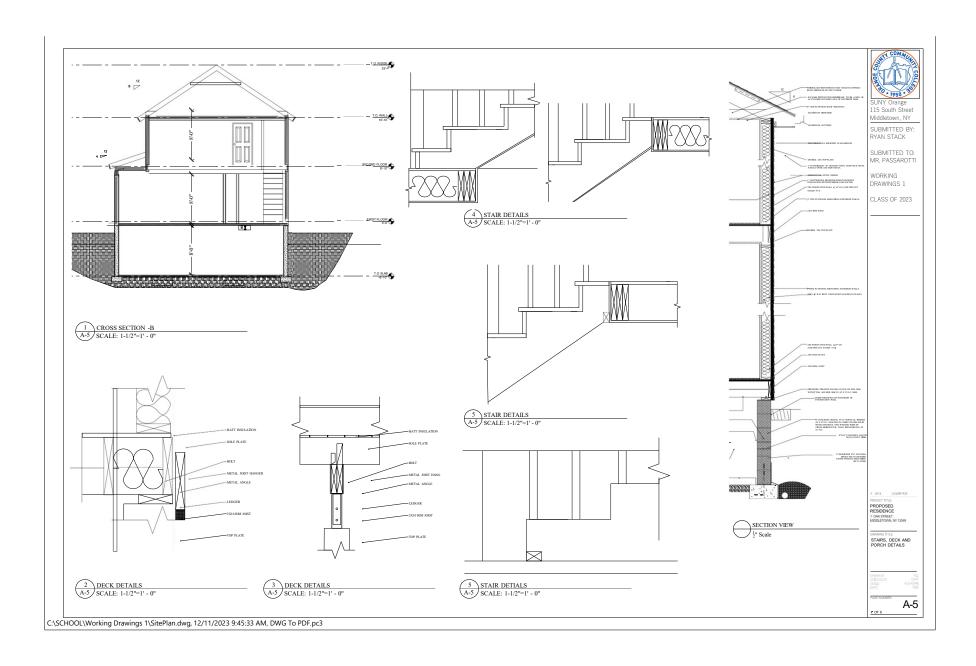
TE PLAN, GENERAL

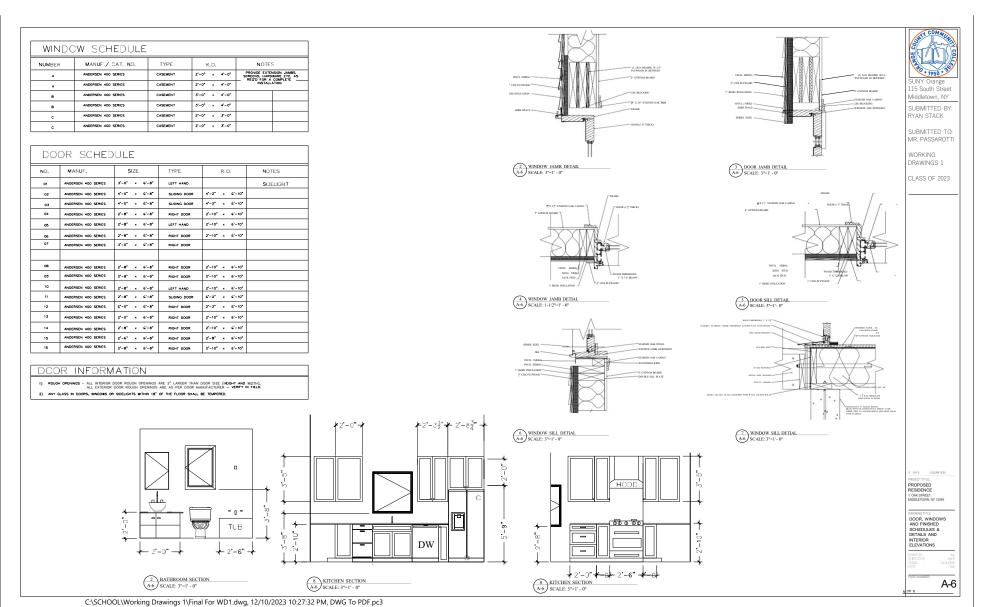
A-1

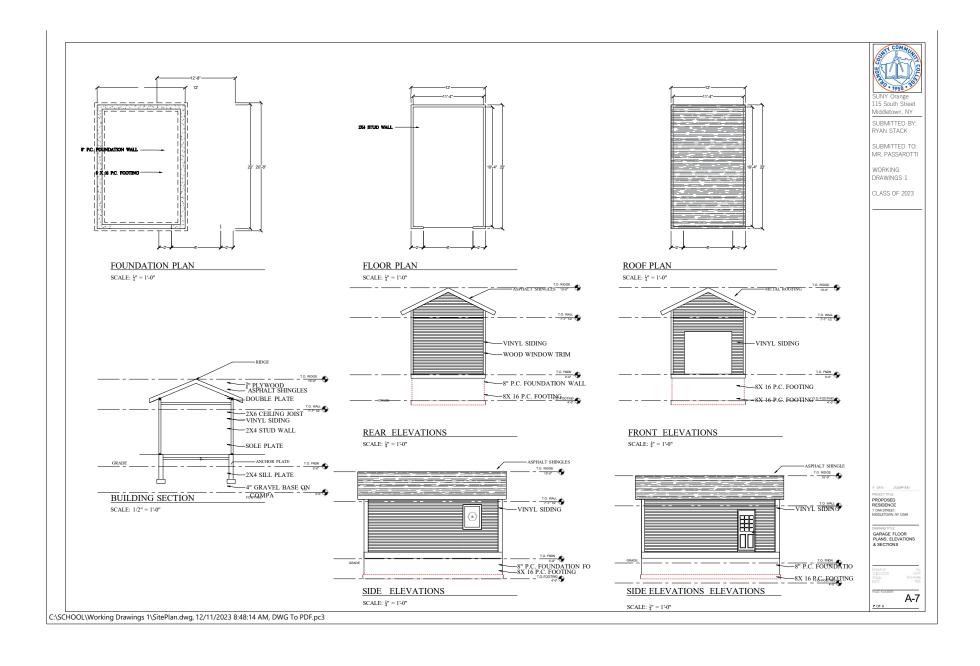






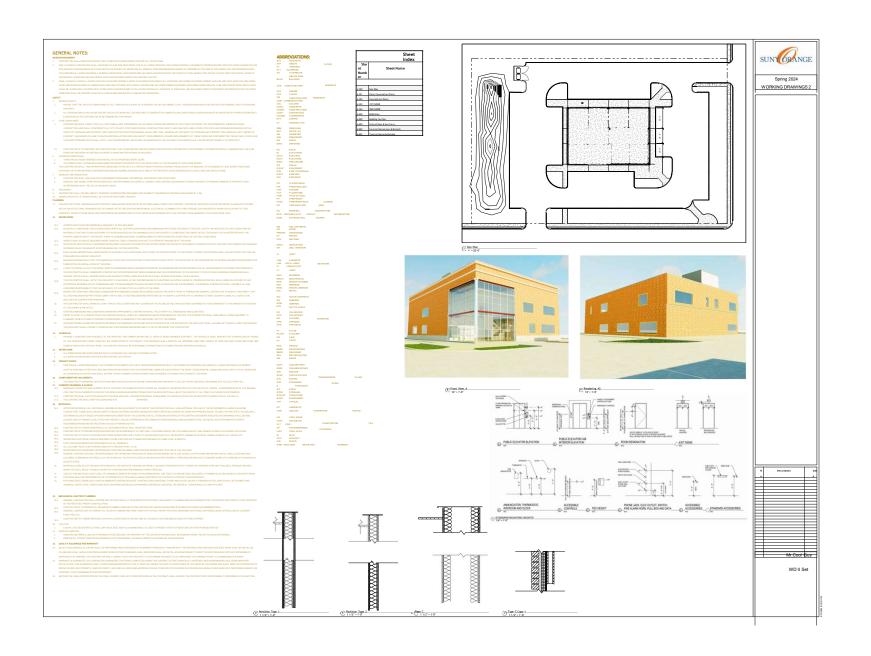


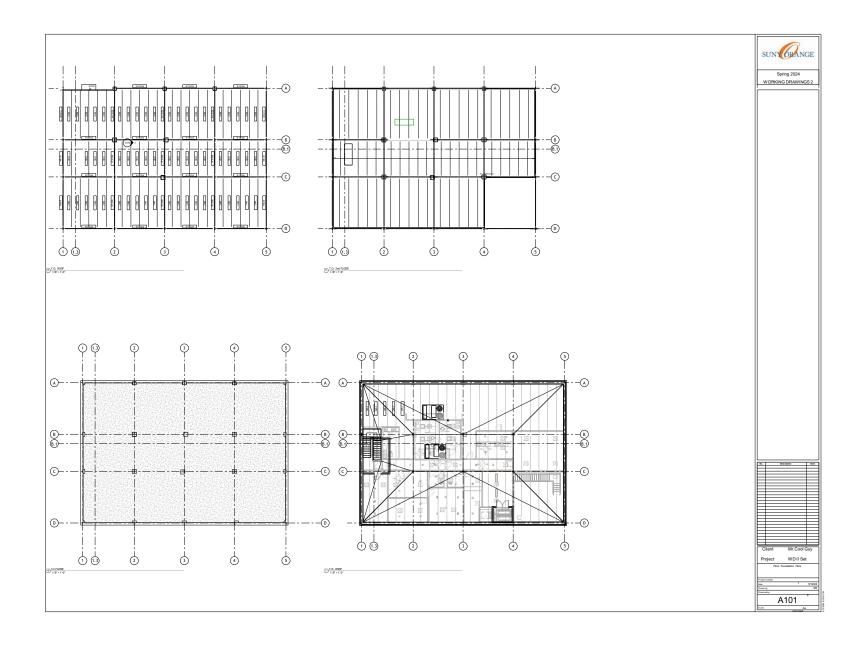


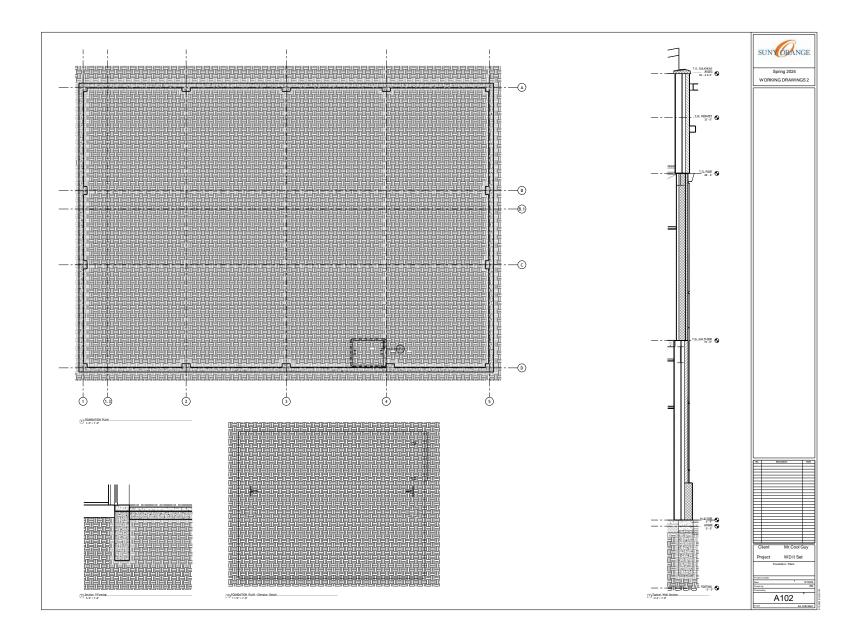


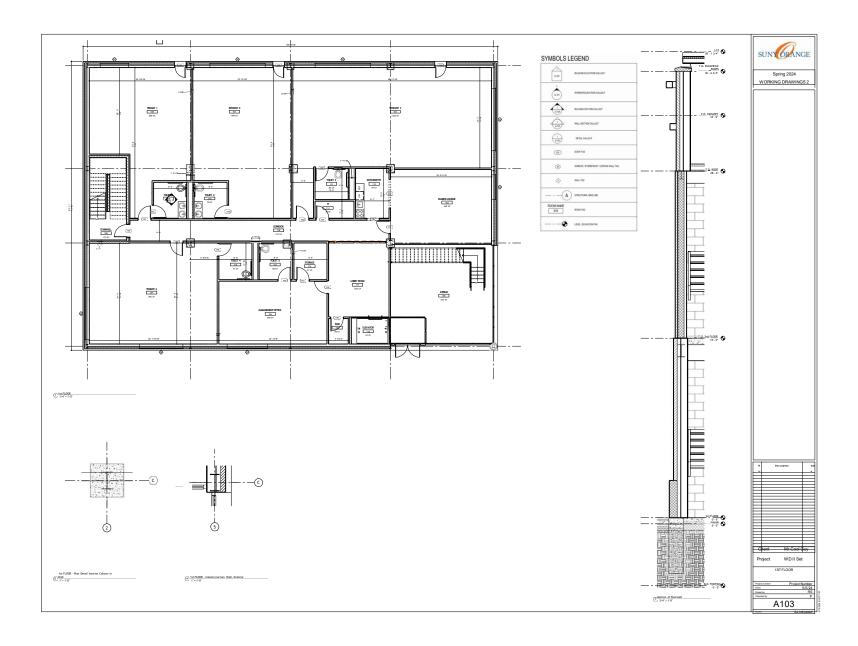
Working Drawings 11

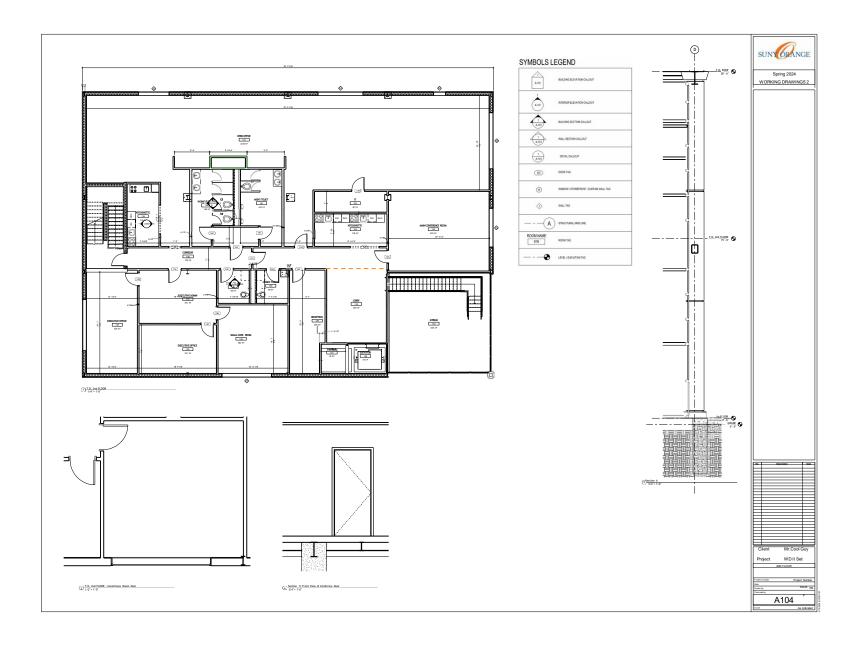
• Commercial Construction Set A-10

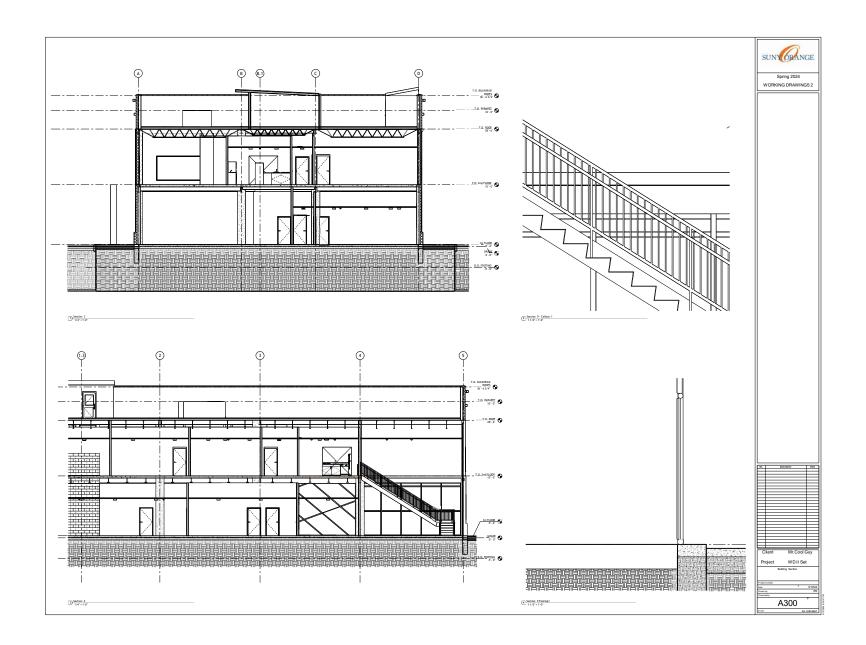


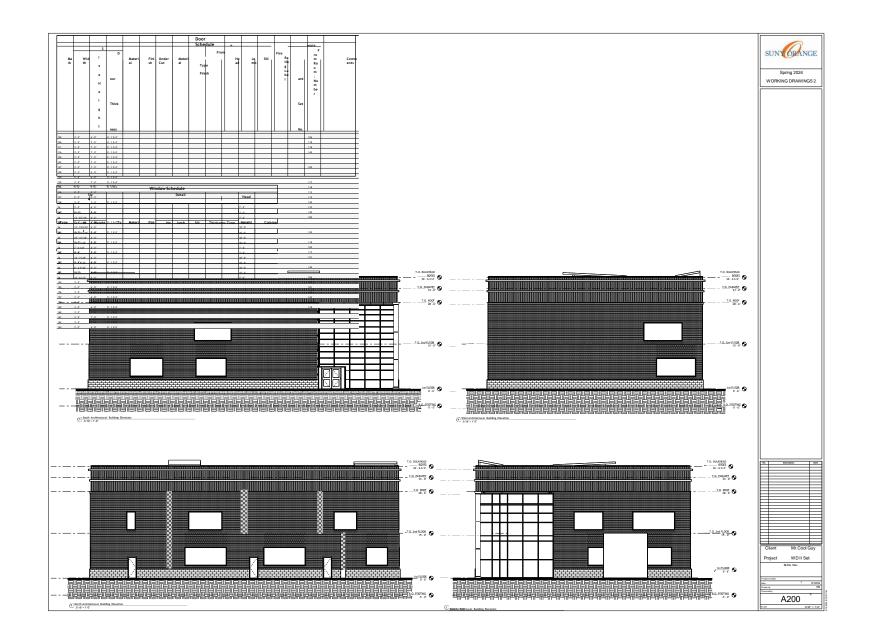


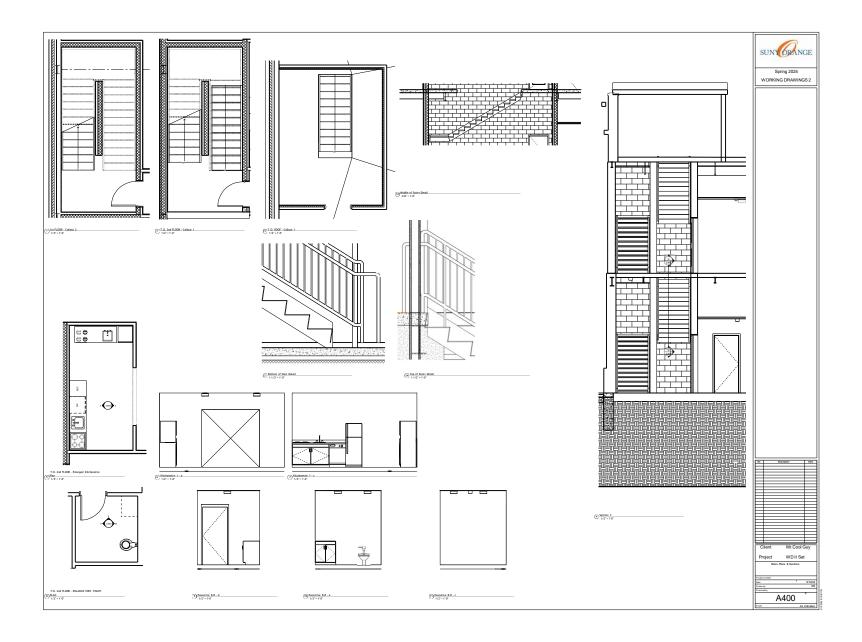


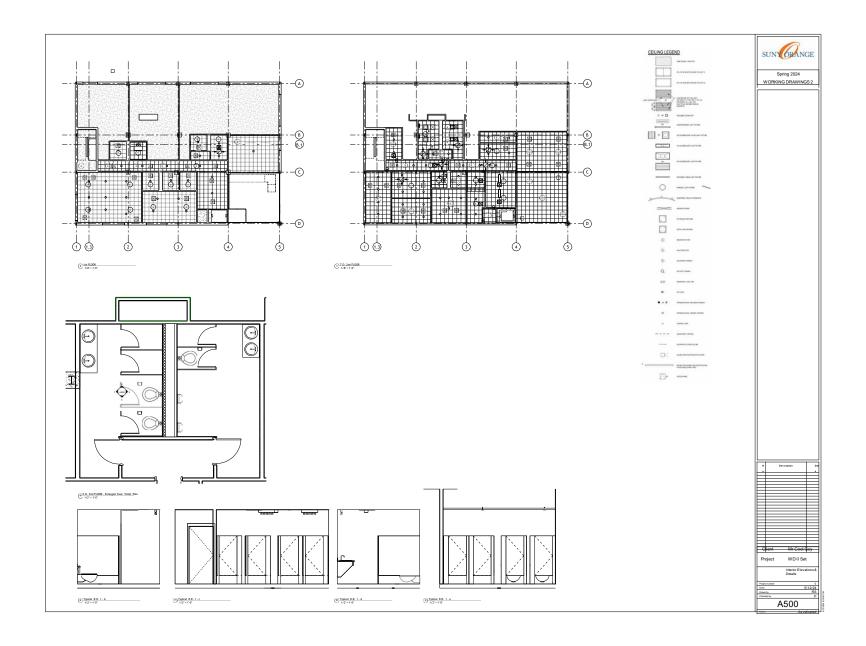


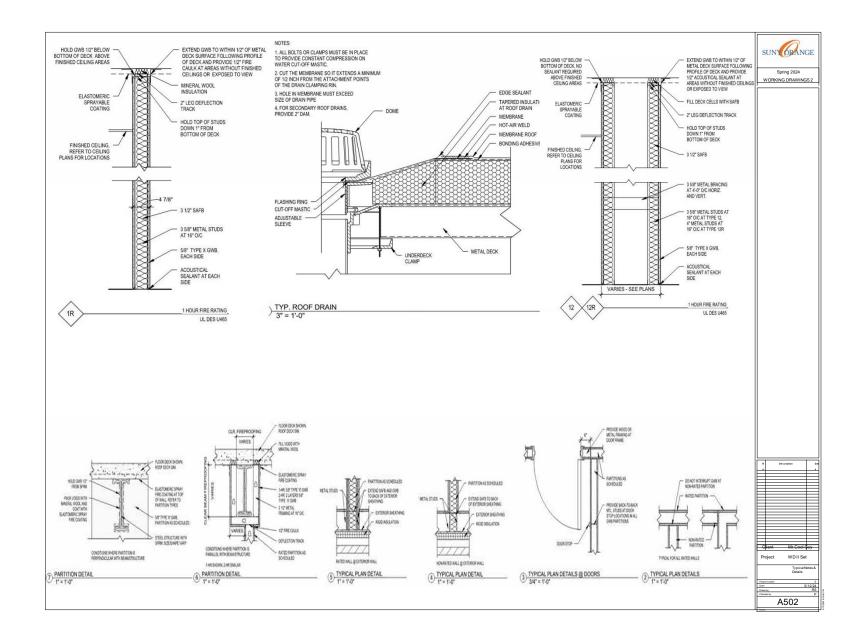


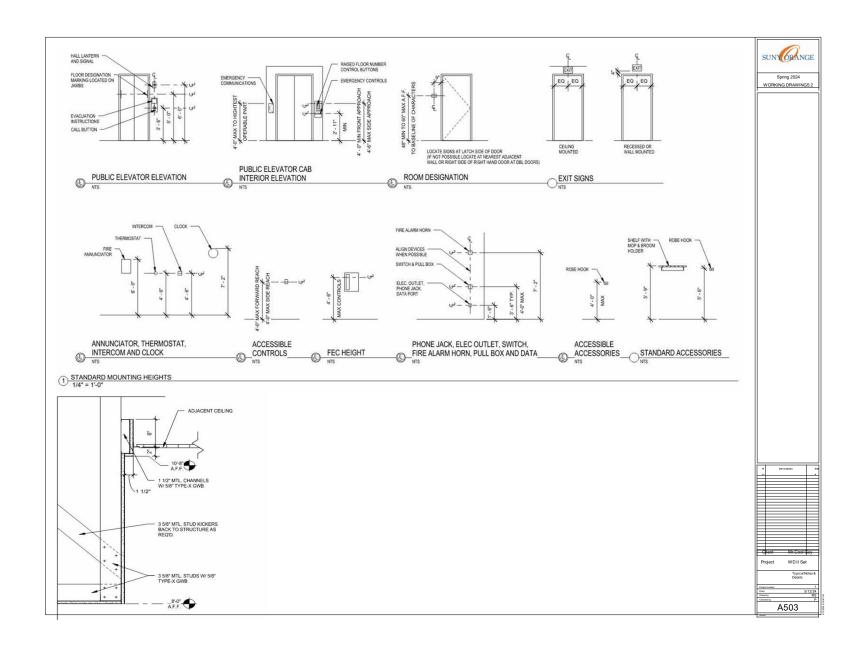






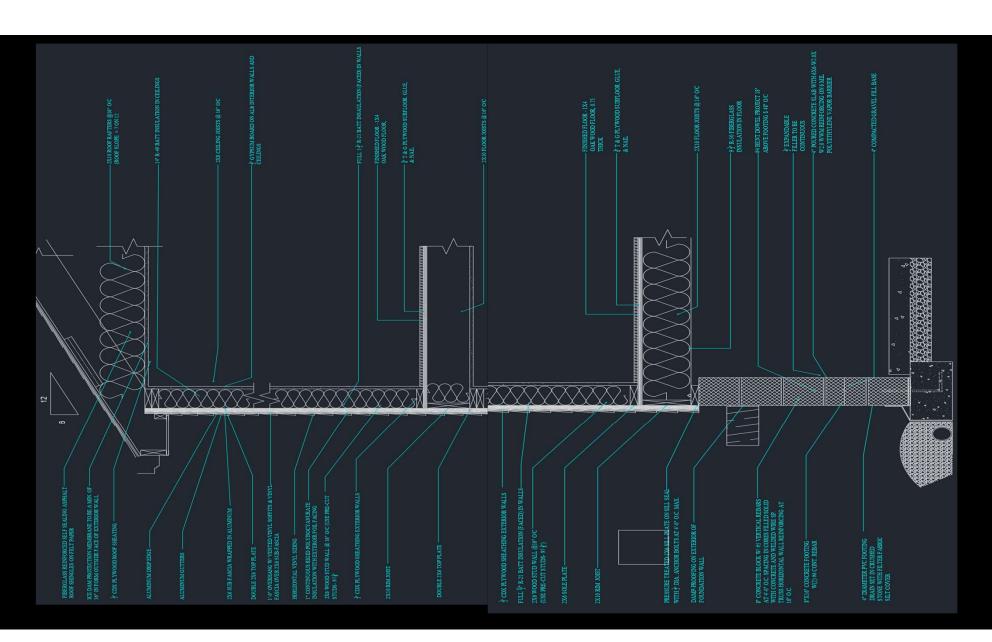






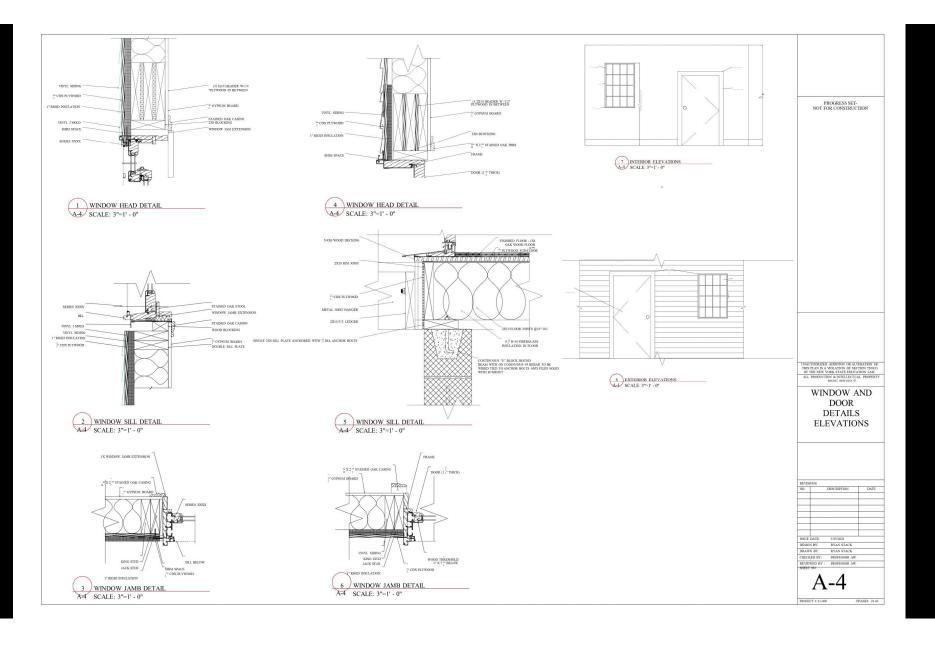
Building Materials, 1811

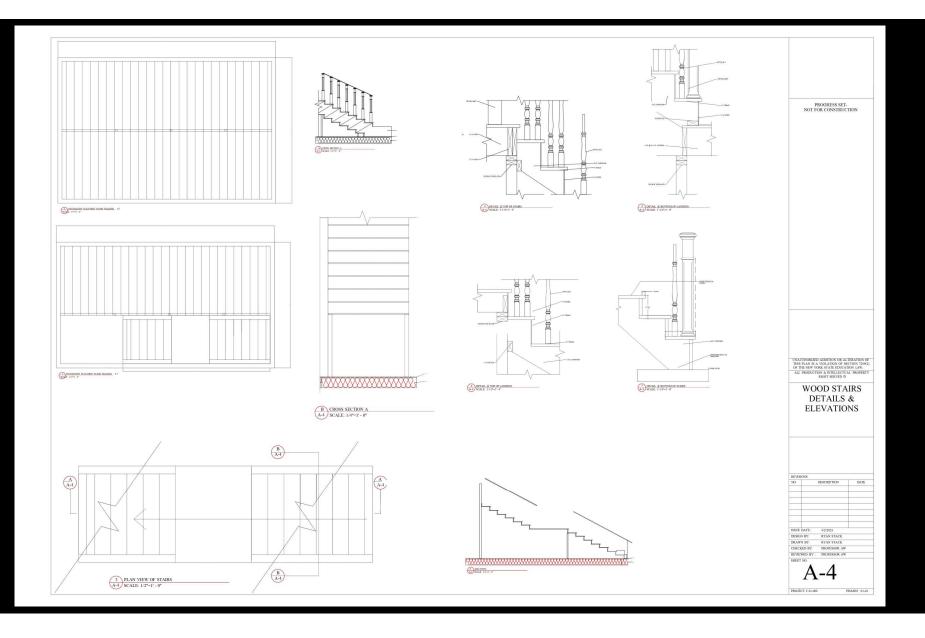
- First House Section
- Wall, Doors & Window Details
- Brick Wall Section
- Stair Details
- Light Weight Steel Framing
- Final Project (House Addition)

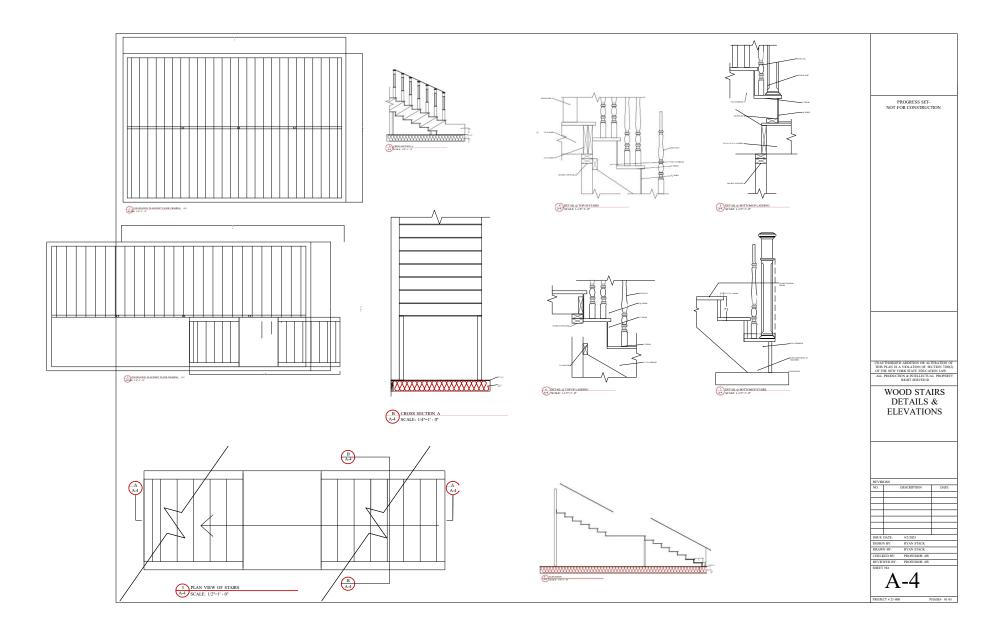


First House Section

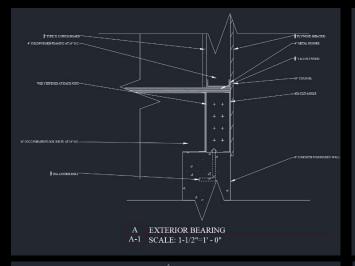
Section Bríck Wall 4" THESE CONCRETE STAB WINS A 2 MELLIN WWW REDGE ON GME, PLOY, VAPOR BARRER 226 PT SILL PLATE W.F. ANCHOR BCLTS @ 8-10" OK ON SILL SIAL INSULATION OF B.21 FEAST BACED BATT DISTLATION (WIVAPOR BA SIDE) THE ASSULPTIONS WORD NOT THE ASSULPTION WORD NOT 25 FORD SALT AS SERVICE OR 15 FORD SALT AS SERVICE OR 15 FORD SALT AS SERVICE SECURIOR OF CO. THE SERVICE DESIGNATION SALTE. FIGH WD. STUD PROME BRICK VEH DANCELLE POOTEN WICH HE RENTORDED BARS (CONT.) ABOVE PTO. @ 32" O.C.



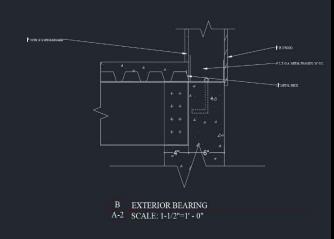


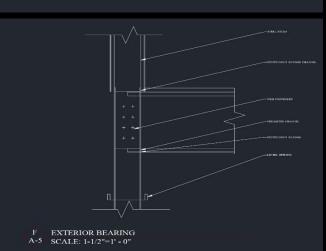


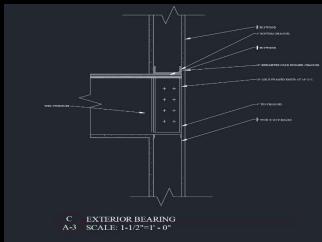
Light Weight Steel Framing

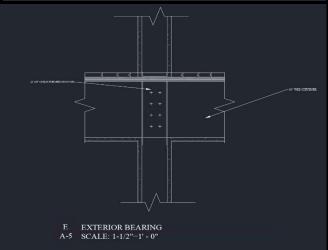


D EXTERIOR BEARING









Final Project House Addition



